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The Canadian Economic and Fiscal Model
1996 Version

CEFM96

CEFM96 : Part 3

EMPIRICAL SPECIFICATION AND STATISTICAL ASSESSMENT

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ABSTRACT

The Canadian Economic and Fiscal Model (CEFM) is used by the Department of Finance to forecast key economic and fiscal indicators and to simulate the economic and fiscal impacts of policy or economic changes. The theoretical structure of the 1996 version of the model, CEFM96, as well as its dynamic forecasting, and simulation properties are discussed in two companion papers. This paper documents the equations estimated in the model and gives statistical assessments of them.

The paper provides detailed regression results, residual-based diagnostic tests, and single-equation dynamic forecasts for all estimated equations to assess their statistical accuracy and forecasting performance. Residual-based tests include autocorrelation, heteroscedasticity, normality, and specification tests. Dynamic forecasts include in-sample dynamic simulations, as well as short- and long-run out-of-sample dynamic simulations.

For key economic relationships in the model, we apply a more exhaustive estimation process suggested by new developments in the macroeconometric analysis of time series. In a first step, unit root and cointegration tests are performed to validate statistically the underlying economic models suggested by the economic theory. In a second step, a general-to-specific approach is used to develop error-correction models. This framework has the advantage of allowing us to test long run relationships between (or impose them on) economic variables, as often suggested by economic theory, without imposing the relationships on short-term dynamics. Finally, we verify the statistical adequacy of these models by applying the above diagnostic and forecasting tests.

RÉSUMÉ

Le Modèle Économique et Fiscal Canadien (MEFC), est utilisé par le Ministère des Finances pour prévoir les indicateurs économiques et fiscaux clés, ainsi que pour simuler l'impact économique et fiscal de changements économiques ou de politiques. La structure théorique de la version 1996 du modèle, MEFC96, ainsi que ses propriétés de prévision et de simulation dynamique sont discutées documentées dans deux autres documents. Ce rapport documente les équations estimées du modèle et présente une évaluation statistique de celles-ci.

Ce rapport collige les résultats détaillés de régressions, de tests de spécification appliqués aux résidus et d'évaluation de prévision pour toutes les équations stochastiques du modèle dans le but d'évaluer leur pertinence statistique et prévisionnelle. Les tests de spécification appliqués aux résidus incluent des tests d'autocorrélation, d'hétéroscédasticité, de normalité et de forme fonctionnelle. Les prévisions dynamiques incluent des simulations dynamiques intra-échantillon ainsi que des simulations dynamiques hors échantillon à court et à long terme.

Pour les relations économiques clés du modèle, nous appliquons un processus d'estimation plus exhaustif basé sur des développements récents de l'analyse macroéconométrique des séries chronologiques. Dans un premier temps, des tests de racine unitaire et de co-integration sont réalisés afin de valider statistiquement les modèles et théories économiques sous-jacents à l'analyse. Dans un deuxième temps, une approche générale-spécifique, basée sur l'élagage d'éléments non significatifs, est utilisée pour développer des modèles de correction des erreurs. Ce cadre d'analyse à l'avantage de permettre de tester ou d'imposer des relations de long terme entre les variables économiques, souvent suggérées par la théorie économique, sans imposer ces relations sur la dynamique de court terme. Finalement, la pertinence statistique et prévisionnelle de ces modèles est vérifiée à l'aide des tests de spécification et de prévision susmentionnés.

1 INTRODUCTION

The Canadian Economic and Fiscal Model (CEFM) is used by the Department of Finance to forecast key economic and fiscal indicators and to simulate the economic and fiscal impacts of policy or economic changes. The theoretical structure of the 1996 version of the model, CEFM96, as well as its dynamic forecasting and simulation properties are discussed in two companion papers.[1] This paper documents the equations that are estimated in the model and gives statistical assessments of them.

Altogether there are 113 estimated equations in CEFM96, of which 61 model economic variables and 52 model fiscal variables. In this paper, we provide detailed regression results, residual-based diagnostic tests, and single-equation dynamic forecasts for each of these equations to assess their statistical accuracy and forecasting performance. Residual-based tests include autocorrelation, heteroscedasticity, normality, and specification tests. Dynamic forecasts include in-sample dynamic simulations, as well as short- and long-run out-of-sample dynamic simulations. These dynamic forecasts are summarized with standard statistics, such as mean percentage errors, mean percentage absolute errors, and Theil inequality coefficients.

For key economic relationships in the model, namely consumption, investment, exports, imports, and the aggregate price level, we apply a more exhaustive estimation process suggested by new developments in the macroeconometric analysis of time series.[2] In a first step, we perform unit root and cointegration tests to validate statistically the underlying economic models suggested by the economic theory. In a second step, we use a general-to-specific approach to develop error-correction models. This framework has the advantage of imposing long-run relationships between economic variables, as often suggested by economic theory, without imposing these relationships on short-term dynamics. Finally, we verify the statistical adequacy of these models by applying the above diagnostic and forecasting tests.

The rest of this paper is structured as follows. Section 2 presents cointegration analysis and error-correction models for consumption, residential investment, business investment and inventories, exports, imports, and the aggregate price level. Section 3 briefly analyses the regression results and the associated diagnostic and forecasting tests; detailed results are shown in Tables 3.1 to 3.12 and Charts 1 to 12. The last section offers concluding remarks. The names of the variables used in the model code are defined in an annex.

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[1] See Robidoux and Wong (1998) and DeSerres, Robidoux and Wong (1998).

[2] See Paquet (1994) for a good presentation of these new developments.

2 UNIT ROOT TESTS, COINTEGRATION TESTS, AND ERROR-CORRECTION MODELS

In this section we show the cointegration tests on the key long-term relationships that are assumed in CEFM96, as well as the unit root tests on the variables used in these relationships.[3] Because many equations in CEFM96 are estimated within an error-correction structure, we examine whether this approach is appropriate by performing cointegration tests on underlying long-term relationships. However, since cointegration tests are performed under the hypothesis that variables are integrated of order one, I(1), we check first for the presence of a unit root in these variables. Finally, we examine if the estimation of error-correction models embodying the tested cointegrating relationships provides empirical specifications with the appropriate statistical and economic characteristics.

2.1 LONG-TERM RELATIONSHIPS

In CEFM96, the error-correction structure is used to model real household expenditures, business investment and inventories, trade flows, and prices. Altogether, there are 12 long-term cointegrating relationships that are assumed to hold in these sectors.[4]

In the household sector, there are two long-term relationships. The first links consumption to income and the real interest rate, while the second links housing investment to income and to the real user cost of housing:[5]

$$\log(C) = \beta_0 + \beta_1 \log(Y_C) + \beta_2 RR_{LT} \tag{2.1}$$

$$\log(I_H) = \beta_0 + \beta_1 \log(Y_C) + \beta_2 (P_H / P_C) \tag{2.2}$$

where C is per capita consumption, Y_C is per capita consumer income, RR_{LT} is the real long-term interest rate, I_H is per capita investment in residential construction, and P_H / P_C is the relative user cost of housing.

In the business investment sector there are three long-term relationships. Business investment is decomposed between machinery and equipment (M) and structure (S), and a long-term relationship is assumed to hold between each of these investment components, output, and their respective real user costs. By contrast, the stock of inventory is assumed to be

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[3] The results presented in this section summarize and elaborate on those presented in Cao and Robidoux (1995) for the household sector, DeSerres (1995) for business investment, and Stuart (1995) for trade flows.

[4] These relationships are described only briefly since the objective of this section is to present statistical analysis. More details on the theoretical and empirical derivations underlying these relationships can be found in Robidoux and Wong (1998) and the papers cited therein.

[5] To keep the notation simple, we represent the parameters to be estimated by α_i and β_i in this paper's equations. Similarly, time subscripts are removed when they are not necessary, as in this section.

determined by the output, the user cost of inventory, and an index of technological change in the management of inventory. More precisely, we have:

$$\log(I_i) = \beta_0 + \log(Y) - \log(UC_i / P) \tag{2.3}$$

$$\log(K_{INVB}) = \beta_0 + \log(Y) + \beta_2 UC_{INVB} + \beta_3 IT \tag{2.4}$$

where I_i is the capital investment of type i (i = M, S), Y is the real commercial Gross Domestic Product (GDP) at factor cost, UC_i is the user cost for capital investment of type i, P is the GDP deflator at factor cost, K_{INVB} is the stock of inventory, UC_{INVB} is the user cost of inventory, and IT is the index of technological change.

As we see from equation (2.3), output and relative price elasticities are imposed to 1 and -1, respectively, in business investment functions. These restrictions originate from the assumption of profit maximization under a Cobb-Douglas production function. It is well known that the elasticities of capital demand with respect to output and the real user cost are 1 and -1, respectively, when a Cobb-Douglas functional form is assumed. The accumulation rule linking investment and the capital stock implies that the same long-term relationships hold for investment. In the inventory function, a more general functional form is implicitly assumed, and as a result only the output elasticity is imposed to 1. However, as shown below, the estimation of an error-correction model embodying the long-term relationship of equation (2.4) generates an estimated long run user-cost elasticity virtually equal to -1, the special Cobb-Douglas case.

In the trade sector, there are six long-term relationships. Half describe export demand functions, while the other half describe import demand functions:

$$\log(X_i) = \beta_{0i} + \beta_{1i} \log(YX_i) + \beta_{2i} \log(P_{Xi} / PF_{Xi}) + \beta_{3i} \log(PT_{FC} / PF_C) \tag{2.5}$$

$$\log(M_i) = \beta_{0i} + \beta_{1i} \log(YM_i) + \beta_{2i} \log(P_{Mi} / PT_{FC}) + \beta_{3i} Q90 \tag{2.6}$$

where X_i is exports of category i (i = C, M, S, representing commodities, end products, and services, respectively); YX_i is the foreign activity variable associated with exports of category i; PX_i is the price of X_i; PF_i is an aggregate foreign price in Canadian dollars associated with category i of exports; PT_{FC} is the domestic GDP deflator at factor cost; PF_C is a U.S. price of commodities excluding food and energy adjusted by the exchange rate. On the import side, M_i is imports of category i (i = C, M, S); YM_i is the domestic activity variable associated with imports of category i, PM_i is the price of M_i; Q90 is a dummy variable that equals 0.5, 0.6, 0.7, or 0.8 in the first to the fourth quarter of 1990, respectively, 1 thereafter, and 0 otherwise.

On the export side, each activity variable corresponds to a G-6 country fixed-weight index of GDP plus imports, while on the import side, each activity variable corresponds to a fixed-weight index of final domestic demand components. The last relative price appearing in equation (2.5) is included only in the function for exported commodities to capture a supply price effect, since commodities are assumed to be a perfectly homogeneous good. The dummy variable

included in equation (2.6) appears in the import demand function for services to capture an assumed permanent increase in travel expenditures.

Finally, the price relationship links the GDP deflator at factor cost to production factor prices and productivity:

$$\log(PT_{FC}) = \beta_0 + 0.62\log(WT) + 0.33\log(PI) + 0.05\log(P_R) - \log(TFP) \qquad (2.7)$$

where PT_{FC} is the GDP deflator at factor cost, WT is the wage rate, PI is an investment price index, P_R is a natural resource price index, and TFP is an index of total factor productivity. The coefficients associated with factor prices and TFP are constrained according to the parameter values used to calibrate the production function.

2.2 Unit Root Tests

Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests are used to check the integration order of time series used in equations (2.1) to (2.7). The ADF test proposed originally by Dickey and Fuller (1979) is the simplest and most widely used test. We use ADF statistics as the fundamental criterion to determine whether a series is stationary or not. Because of the power and size limitations of unit root tests, however, [6] we also use a second test for comparison. We choose the PP non-parametric unit root test proposed by Phillips and Perron (1988). This test has the advantage that it applies to series that are assumed to follow more general time-series processes than those assumed in the ADF test.[7]

The ADF and PP unit root tests are performed for both the level and first difference of each variable appearing in the cointegrating relationships described above. The ADF test starts with a trend, a constant, and eight lags of the first difference of the tested variable. Lags are removed recursively until a lag is found significant at the 10 per cent level as suggested by Campbell and Perron (1991). The same procedure is then performed without a trend. The PP test is also performed with a constant and a trend, and with a constant only, but the lag truncation parameter in the PP test is determined by the formula suggested by Schwert (1989). Following his suggestion, the truncation lag length is set at $4(T/100)^{0.25}$ rounded to the nearest integer, where T is the number of observations.

Generally, the PP test is not reliable for variables that have a negative moving average (MA) component that is less than -0.2 in their autoregressive moving average (ARMA) representations. Schwert (1989) found that in small samples the Phillips-Perron test too often tends to reject the unit root hypothesis, while the ADF test with enough lags performs better. Hence, an integrated moving average (IMA) (1,1) model is estimated for each series under

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[6] Unit root tests often cannot reject the null hypothesis of a unit root because they have little power against the alternative hypothesis of a stationary but large root.

[7] Comparing ADF and PP tests, Handa and Ma (1989) conclude that the ADF test performs better with non-normal innovations or with heteroscedastic errors in small samples. However, the PP test has better properties in large samples or with autocorrelated errors.

consideration to determine whether the unit root tests, and particularly the PP test, are potentially affected by a negative MA component. When the MA coefficient is less than -0.2, the result of the PP test is not considered in determining the presence, or not, of a unit root.

To determine whether a linear time trend should be included in unit root tests, we compute the standardized drift as suggested by Schmidt (1990). When the standardized drift is small, it implies that the effect of a drift in the series is negligible. It is then more appropriate to look at the ADF and PP tests with a constant only. In contrast, when the standardized drift is large, it is preferable to test for the presence of a unit root with both a trend and a constant in the specification.

Tables 1.1 and 1.2 summarize the results of unit root tests. For all the series, the sample period ends in 1994Q4. The starting periods are the same as regression periods, which may vary between series. In these tables, the first column shows the variable tested. The second and third columns list the probability of accepting the unit root hypothesis for the ADF test with a trend and a constant, and with a constant only, respectively. The fourth and fifth columns give the probability of accepting the unit root hypothesis for the PP test with a trend and a constant, and with a constant only, respectively. The sixth column gives the moving average coefficient in an estimated IMA (1,1) model of the corresponding variable, while the seventh column gives the standardized drift. The last column specifies the sample period.[8]

The results of unit root tests for the levels of variables are presented in Table 1.1. As expected, the standardized drift is large for most variables. This suggests that the presence of a unit root can be tested without a trend for only a limited number of variables.[9] In any event, including a trend or not in test specifications does not change the results much at the usual confidence levels. As Table 1.1 shows, for most series the ADF and PP tests cannot both reject the presence of a unit root at the 5 per cent level. There are four series where one test suggests a trend-stationary process,[10] while the other suggests the presence of a unit root[11]. For one series only, exports of services (X_S), the null hypothesis of a unit root is rejected in favour of a deterministic trend by both tests.[12] Finally, there is some evidence that non-residential construction investment (I_S), the real user cost of non-residential construction (UC_S/P), the price of natural resources (P_R), and the total factor productivity (TFP) are mean stationary. This

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[8] Joint null hypotheses that coefficients of constant and/or trend are zero in addition to the presence of a unit root were also tested to guide us in getting the most appropriate description of each series. The results of these tests are not presented in detail here but are available from the authors upon request.

[9] As noted above, in addition to the standardizzd drift, the pertinence of having a time trend in the test specification is verified with joint tests implying the unit root coefficient as well as coefficients on constant and trend. According to this procedure, it appears appropriate to increase the power of our unit root tests by removing the trend for the following series: I_H, UC_{INVB}, P_{XS} / PF_{XS}, P_{MS} / PT_{FC}, TFP, P_R.

[10] A series is considered trend stationary when H_0: $\rho=1$, $\beta_t=0$ is rejected at the 5 per cent level, where ρ is the unit root coefficient and β_t is the trend coefficient.

[11] These series are: PT_{FC}, WT, M_C, UC_{INVB}.

[12] This may cause problems when we perform an Engle-Granger cointegration test. But as Campbell and Perron (1991) point out, for any trend-stationary process there is a difference-stationary process that approximates it arbitrarily well in finite samples, and vice versa.

unexpected result reflects the short sample period used for these variables, since the unit root shows up when the sample is extended back.

The results of unit root tests for the first differences of variables are presented in Table 1.2. In contrast to the level tests, the standardized drift is small enough for all variables that we can use the specification without trend to increase the power of ADF and PP tests without affecting their size distributions.[13] However, many series exhibit large negative moving average serial correlation, suggesting that for these variables we should use only the ADF test in evaluating the presence of a unit root. For most series, the presence of a unit root is rejected at the 5 per cent level or less. In the cases of the wage rate, *WT*, and exports and imports of services, X_S and M_S, the *PP* test seems to have more power, since it rejects the unit root at the 1 per cent level, while the ADF test cannot, even at the 10 per cent level.[14] For a limited number of variables, the confidence level must be increased up to 10 or even 15 per cent to reject the null of a unit root. However, this seems to reflect the low power of these tests in small samples, since the unit root hypothesis can be rejected at the 1 per cent level for all these series when all available data are used.[15] The only variable that seems to be I(2) according to these results is the index of technological change in inventory management, *IT*.

As Schwert (1989) shows, the ADF test is insensitive to negative moving average serial correlation if enough lags are included in the specification. In that respect, our results can be distorted by the fact that the procedure used to select the number of lags often ends up with few lags. To cover that possibility, we have also performed all ADF tests with eight lags and the maximum number of observations for the first difference of each series to verify the robustness of our results. Overall, this alternative procedure gives the same conclusions as the ones presented above. There is, however, one interesting marginal change in the results. At the margin, we cannot reject the presence of a unit root at the 10 per cent level in inventory growth.[16] This suggests a possible cointegration relationship with the technological index, which could then be matched with output and the inventory user cost to obtain an I(0) cointegrated relationship.

Thus, it seems a reasonable assumption that most of the variables are well characterized, or at least closely approximated, by an I(1) process over the sample periods considered. However, the index of technological change in inventory management, and, to a lesser extent, inventories, is likely to be I(2), while investment in non-residential construction and the

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[13] For only two variables, X_S and PT_{FC}, unit root tests with a trend give different conclusions.

[14] In these cases, the moving average coefficient is not far from -1, so common roots can be assumed.

[15] This is the case for *C*, Y_C, YX_S, YX_M and PT_{FC}/PF_C. Note that in the case of consumption, the confidence level has to be increased to more than 30 per cent with the regression sample, while the unit root can be rejected at the 1 per cent level over the 1966-1994 period.

[16] The results are also different for wage growth and inflation, which are I(1) when this procedure is used. However, this is caused by the inclusion of the inflationary episode of the 1970s as documented by Perron (1993) and Dea and Robidoux (1995). Indeed, when the sample starts in 1980, the moving average coefficient is close to -1, as shown in Table 1.2, and the standard lag selection procedure can be used.

corresponding real user cost may be I(0). The total factor productivity index and the price of natural resources also appear to be stationary in the short sample examined.

How will the presence of potentially I(0) and I(2) variables affect the cointegration tests performed in the next section? On the one hand, finding support for cointegration in the inventory function would suggest that there are two cointegrated I(2) variables, while the absence of such support would suggest instead the absence of cointegration between these I(2) variables, or the presence of only one I(2) variable in the tested cointegration vector. On the other hand, the free estimation of a cointegrating vector for the business construction investment function would not be valid if investment were an I(0) series. Asymptotically, the regression of an I(0) series on I(0) and I(1) series will lead to an I(0) residual, as the coefficient of the I(1) variable will converge to zero. This potential problem should be avoided, however, if the vector of the cointegrating coefficient is fixed to theoretical values as suggested above. In that context, finding empirical evidence for cointegration will indeed suggest the presence of at least two I(1) variables and hence a true cointegrating relationship. Finally, the presence of two I(0) variables in the price equation would reduce the power of our cointegration tests in a free estimation, but should not affect the power of those performed on a theoretically constrained model.

2.3 Cointegration Tests

The evidence for cointegration is evaluated with the univariate residual-based test recommended by Engle and Granger (1987) as well as the multivariate test suggested by Johansen (1988). The Engle-Granger test is essentially an ADF unit root test on the residual obtained from an ordinary least squares (OLS) regression of the long-run relationship considered. As for the unit root tests performed in the previous section, the presence of a unit root in this residual is also examined with the PP test. The Johansen test corresponds to the statistical evaluation of the rank of the matrix of coefficients associated with level variables in a vector autoregressive error-correction system formed with the set of variables under consideration. The first approach allows us to test only the null of no cointegrating vector against the alternative of one vector, while the second test allows us also to test whether there is more than one cointegrating vector.[17]

In the Engle-Granger procedure, the ADF test is performed with eight lags of the first-difference of the tested variable (that is, the residuals from an OLS regression) but without a trend or constant. The methodology mentioned earlier is used again to select the appropriate number of lags. However, the PP test is performed with a constant. For the Johansen procedure, the number of lags in the vector error-correction model (VECM) is increased from one up to the point where a Lagrange multiplier (LM) test for autocorrelation of order 10 shows no evidence of autocorrelated residuals in any equation.[18] The hypothesis regarding the presence or absence of a

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[17] In principle, the Johansen test should be superior to the single-equation Engle-Granger test, since it takes into account the potential endogeneity of regressors. However, as shown by Gonzalo and Lee (1995), the Engle-Granger test is generally superior to the Johansen test for specific data generating processes.

[18] The normality of residuals has also been examined with the Jarque-Bera test.

deterministic trend in the data is tested with the likelihood ratio test suggested by Johansen and Juselius (1990).

The results of the cointegration tests are presented in Table 2.1. The first column gives the mnemonic of the dependent variable associated with the tested long-term relationship. The second to fourth columns are results from the Engle-Granger procedure: the second column lists the probability of accepting the unit root hypothesis of the ADF test without a trend or constant; the third column gives the probability of accepting the unit root hypothesis for the PP test with a constant; the fourth column is the moving average coefficient in an IMA(1,1) model of the corresponding residuals. The fifth to seventh columns are results from the Johansen procedure: the fifth and sixth columns give the confidence level at which the non-cointegration hypothesis can be rejected according to the trace and maximum eigenvalue statistics, respectively; the seventh column indicates the number of cointegration vectors. The last column gives the sample period used in each cointegration test.

The conclusion reached depends on the test performed. The ADF and PP tests reject the non-cointegration hypothesis at the 5 per cent level for all investment functions, the price function, and the import demands for end products and services. The ADF test also provides weak evidence of cointegration for the export demand of end products, while the PP test does the same for consumption and inventory functions.[19] In contrast, apart from the consumption function and the import demand for commodities, the Johansen test supports the presence of cointegration at least at the 10 per cent level for all relationships tested with either the trace or the maximum eigenvalue statistics. For the consumption function and the import demand for commodities, the confidence level must be increased to 20 per cent.

Overall, we conclude that we have strong evidence of cointegration for investment functions, the price function, and import demands for end products and services, but weaker evidence for other functions. As the next section shows, however, the estimation of error-correction models embodying these assumed long-term relationships provides further evidence that useful long-term relationships exist even for those functions for which formal tests provide mixed evidence.

2.4 Error-Correction Models

Assuming that all specifications described in Subsection 2.1 are characterized by long-term cointegrating relationships, we can estimate error-correction models for consumption, residential investment, business investment and inventories, trade flows and prices.[20] Using a

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[19] The PP tests is not useful in testing the presence or absence of cointegrating relationships for export, import , and price functions because of a large negative MA coefficient in the estimated IMA(1,1) model.

[20] In this section, the discussion focuses on results that provide further evidence on the presence or absence ofcointegration relationships. Detailed regression results are presented and discussed in the next section.

general to specific approach, we derive the following final models: [21]

$$\Delta\log(C_t) = \alpha_1\Delta\log(Y_{C,t}) + \sum_{i=2}^{4}\alpha_{2i}(R_{ST} - R_{LT})_{t-i} + \alpha_3 UGAP_t + \alpha_4[\log C - \beta_0 - \beta_1\log(Y_C) - \beta_2 RR_{LT}]_{t-1} \quad (2.8)$$

$$\Delta\log(I_{H,t}) = \alpha_1\Delta\log I_{H,t-1} + \alpha_2(R_{ST} - R_{LT})_{t-3} + \alpha_3 UGAP_t + \alpha_4[\log(I_H) - \beta_0 - \beta_1\log(Y_C) - \beta_2(P_H/P_C)]_{t-1} \quad (2.9)$$

$$\Delta\log(I_{S,t}) = \alpha_1\Delta\log Y_{t-1} + \alpha_2\Delta\log(UC_S/P)_{t-1} + \alpha_3 YGAP_{t-1} + \alpha_4[\log I_S) - \beta_0 - \log Y + \log(UC_S/P)]_{t-1} \quad (2.10)$$

$$\Delta\log(I_{M,t}) = \alpha_1(\log(Y_{t-1}) - \log Y_{t-5}) + \alpha_2\Delta\log(UC_M/P)_{t-1} + \alpha_3 YGAP_{t-1} + \alpha_4[\log(I_M) - \beta_0 - \log(Y) + \log(UC_M/P)]_{t-1} \quad (2.11)$$

$$\Delta\log K(_{INVB,t}) = \alpha_1\Delta\log K(_{INVB,t-1}) + \alpha_2 YGAPN_{t-1} + \alpha_3[\log K(_{INVB}) - \beta_0 - \log(Y) - \beta_2 UC_{INVB} - \beta_3 IT]_{t-1} \quad (2.12)$$

$$\Delta\log(X_{i,t}) = \sum_{k=1}^{2}\alpha_{ki}\Delta\log(YX_{i,t-1-k}) + \alpha_{3i}\Delta\log(P_{Xi}/PF_{Xi})_t + \alpha_{4i}[\log X_i - \beta_{0i} - \beta_{1i}\log YX_i - \beta_{2i}\log(P_{Xi}/PF_{Xi}) - \beta_{3i}\log(PT_{FC}/PF_C)]_{t-1} \quad (2.13)$$

$$\Delta\log(M_{i,t}) = \sum_{k=1}^{2}\alpha_{ki}\Delta\log(YM_{i,t-1-k}) + \alpha_{3i}\Delta\log(P_{Mi}/PT_{FC})_t + \alpha_{4i}Q90 + \alpha_{5i}Q83_t + \alpha_{6i}[\log(M_i) - \beta_{0i} - \beta_{i1}\log(YM_i) - \beta_{2i}\log(P_{Mi}/PT_{FC}) - \beta_{3i}Q90]_{t-1} \quad (2.14)$$

$$\Delta\log(PT_t) = \sum_{i=1}^{2}\alpha_i\Delta\log(COST_{t-i+1}) + \alpha_3\Delta\log(PM_{t-1}) + \alpha_4[\log(PT) - \log(COST)]_{t-1} \quad (2.15)$$

where Q83 and Q90 are dummy variables, R_{ST} is the nominal short-term interest rate, R_{LT} is the nominal long-term interest rate, *UGAP* is the unemployment gap, *YGAP* is the potential output gap, and *YGAPN* is the normal output gap. The *COST* variable corresponds to the predicted value of equation (2.7). For each model, the term in square brackets is the error-correction term. It corresponds to the deviation of the dependent variable from its equilibrium or long-term value. As a result, the coefficient associated with it should have a negative sign to force the dependent variable to return to its equilibrium value in the long term.

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[21] More details about the theoretical and empirical derivations of these models can be found in Robidoux and Wong (1998) and the papers cited therein.

Although the literature suggests many alternative approaches to estimating parameters of a cointegrating vector, these parameters are derived from the direct one-step estimation of error-correction models in CEFM96 using non-linear least squares. The only exception is the price error-correction model, which is estimated in two steps by OLS.

Although performing formal cointegration tests is a necessary preliminary step in the building of an error-correction model, it is important that such models can depict long-term elasticities that are consistent with economic theory. The long run price and output elasticities generated by the estimation of these error-correction models are presented in Table 2.2, in parallel with the same parameters obtained from Engle-Granger and Johansen approaches. The long-term elasticities derived from the estimated error-correction models all have the correct signs. In general, the elasticities obtained from the two cointegrations tests are similar to elasticities obtained from the direct estimation of error-correction models. The two notable exceptions are the real interest rate semi-elasticity of consumption and the price elasticity of imported end products that are positive rather than negative when estimated with Engle-Granger or Johansen methods.

The estimated error-correction terms and their associated p-values are also presented in Table 2.2. All these terms are significant and negative, as expected. This also supports the presence of cointegrating relationships, since in theory, in the absence of such relationships, these error-correction terms converge to zero. As indicated by small estimated error-correction terms, business investment, inventory, prices, and consumption react slowly to deviations from their respective equilibrium values.[22] In contrast, most trade flows and housing investment tend to return rapidly to their equilibrium values after temporary shocks.

We would also expect an error-correction model to forecast poorly if a long-term cointegration relationship were incorrectly assumed. The capacity of our error-correction models to forecast is thus assessed by performing out-of-sample dynamic simulations over the period 1990Q1 to 1994Q4. The results of these out-of-sample dynamic simulations are presented in different panels of Charts 1, 2, 3, and 5. They tend to support the presence of a cointegration relationship in most estimated functions. Over that five-year horizon, most models performed well at tracking the actual series; out-of sample forecasts are relatively precise and do not exhibit any systematic bias. The most notable exceptions are the import functions for commodities and end products.

We conclude that, in general, the single-equation error-correction models used in CEFM96 are accurately specified according to statistical and forecasting tests. As noted above, these results provide further evidence that useful long-term relationships exist even for consumption and exports where formal cointegration tests provide mixed evidence. We should stress, however, that the underestimation of imports in out-of-sample dynamic simulations suggests the presence of structural breaks in associated models.

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[22] The value of the error-correction term is imposed to -0.05 in the business construction investment function.

3 REGRESSION RESULTS

In this section, we present and discuss regression results for each stochastic equation in CEFM96. In addition to estimation results, we present residual-based diagnostic tests and dynamic out-of-sample simulations to assess the statistical accuracy of these estimated equations. Most regression samples end in 1994Q4 but start at different dates depending on data availability or the presence of structural breaks.

The standard output results include the standard deviation of the dependent variable (SDDV), the adjusted R^2 (adj. R2), the standard error of the regression (SER) and the mean percentage absolute error (MPAE.FIT). We use these statistics to check the in-sample static fit (FIT) of the regressions. We also present mean percentage error (MPE.ISDF) and mean percentage absolute error (MPAE.ISDF), computed from in-sample dynamic simulations, to provide additional information for models incorporating lagged dependent variables. Residual-based diagnostic tests include Lagrange multiplier (LM) tests for autocorrelation of order 1 and 4, a test for autoregressive conditional heteroscedasiticity of order 2 (ARCH(2)), a White heteroscedasticity-specification test without cross products (WHITE), a Jarque-Bera normality test (NORMALITY), and a Ramsey RESET specification test of order 2.

To assess the out-of-sample forecasting performance (and parameter stability) of single-equation models, we re-estimate each equation up to 1989Q4 and then perform dynamic simulations up to 1994Q4. In addition to this long-term forecast, we also perform a rolling short-term forecast. Each year during the 1990-1994 forecast period, the equations are re-estimated to update estimated coefficients before producing a one year-ahead out-of-sample dynamic forecast.[23] For both of these out-of-sample dynamic forecasts, we calculate the mean percentage error, mean percentage absolute error, and Theil inequality coefficient. As usual, the Theil inequality coefficient is decomposed into bias, variance, and covariance proportions.[24] For all equations, these out-of-sample dynamic forecasts are plotted in various panels of Charts 1 to 12.[25]

For the adjusted R^2 and the standard deviation of the dependent variable, the dependent variable *y*, is defined as the left-hand side (LHS) expression, while for other statistics reported, *y* is defined as the first-level variable appearing in the LHS expression. Finally, in Tables 3.1 to 3.12, the variable names are those used in the program code. These variable names are defined in the annex at the end of the paper.

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[23] Since we use quarterly data, we thus have 20 forecast observations in both cases.

[24] The bias proportion is an indication of systematic errors; variance proportion measures the ability of the equation to replicate the degree of variability of the series; covariance proportion indicates the proportion of unsystematic errors.

[25] For variables defined as a rate, such as interest rates, the mean percentage error and the mean percentage absolute error are replaced by the mean error and the mean absolute error, respectively.

3.1 HOUSEHOLD SECTOR

Our study of the household sector is mainly concerned with the determination of aggregate consumption and housing investment. As noted above, consumption and residential investment functions are estimated within an error-correction framework. Estimation results and residual-based diagnostic tests for these functions are presented in Table 3.1. According to residual-based specification tests, these estimated functions displayed reasonably well-behaved residuals. However, the consumption function seems to depict autocorrelated residuals, while the housing investment function seems to have abnormal residuals. The RESET test tends also to suggest the presence of specification problems in the consumption function.

The dynamic forecast performance of these models is presented in Table 3.1 and Chart 1. For both models, the in-sample dynamic forecast tracks the actual series well. The fact that residential investment is forecast less precisely than consumption results mainly from the larger variance in investment growth. More interestingly, the out-of-sample dynamic forecast derived from these models capture well the large fall in consumption and residential investment observed in the last recession. In addition, the out-of-sample forecast produced by these models is unbiased, particularly for consumption, over a horizon as long as five years. Over that forecast horizon, the absolute errors average roughly 1 and 5.1 per cent, respectively, for consumption and residential investment, both of which is less than twice the average absolute errors observed in-sample.

In the consumption function, the parameter of the change in the logarithm of consumer income is constrained to 0.2. In an unconstrained estimation, this coefficient is not estimated precisely and causes instability in other parameters. In the long term, the income elasticity is 1.2 and the real interest rate semi-elasticity is -0.7.[26] In the short term, these long run determinants do not have much effect on consumption because of the dynamic specification in the error-correction model. In contrast, the spread between short- and long-term interest rates and the unemployment gap contributes significantly to the short-run behaviour of consumption. The semi-elasticity of consumption with respect to the spread is roughly -0.4 in the first year building up to -2.0 in the long run. The semi-elasticity of consumption with respect to the unemployment gap is 0.16 in the short run and 0.80 in the long run.

The long-term determinants of residential investment are consumer income and the real user cost of housing. The long-term income elasticity is 1.67 and the long-term real user cost semi-elasticity is -1.53.[27] Again, the effects of the interest rate spread and the unemployment gap are statistically significant and important. The semi-elasticity of residential investment with respect to the spread is roughly -1.1 in the very short run, building up to -2.0 in the long run. The

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[26] Although these long-term cointegrating coefficients are probably not distributed normally, the low calculated t-statistic associated with the interest rate coefficient suggests that the impact of the real interest rate on consumption is not precisely estimated. In contrast, the impact coming from the interest rate spread is highly significant.

[27] The large calculated t-statistics associated with these elasticities suggest relatively precise estimates although they are probably not distributed normally.

semi-elasticity of residential investment with respect to the unemployment gap is 1.6 in the very short run and 3.0 in the long run. The presence of the lagged change in residential investment in the function implies that residential investment reacts more to shocks in the short run than in the long run.

The study of the household sector is completed by an equation for rent consumption, which is mainly used to calculate the commercial GDP, and an equation for fuel consumption. The regression for rent consumption does not exhibit well-behaved residuals since we are not able to reject the hypothesis that they are autocorrelated, heteroscedastic, and not normally distributed. This reflects the simple linear structure that we have imposed on this equation.[28] However, this does not affect much the ability of this equation to track the actual series in both in-sample and out-of-sample simulations. The residuals of the regression for fuel consumption suffer only from the presence of heteroscedasticity according to the WHITE test. In addition, the equation performs reasonably well in dynamic forecast simulations.

3.2 Business Investment

Three categories of business investment are determined by stochastic equations: machinery and equipment, construction, and inventories. These equations are all estimated within an error-correction framework. Estimation results and residual-based diagnostic tests for these equations are presented in Table 3.2. According to the residual-based diagnostic tests, these models display well-behaved residuals at the usual confidence levels.

The dynamic forecast performance of these error-correction models is presented in Table 3.2 and Chart 2. In-sample dynamic simulations indicate that the inventory model tracks more precisely on average than the two other models. Again, this reflects the larger variance in the growth rate for M&E and construction investment than in the growth rate for inventory. The low adjusted R^2 obtained in these regressions highlights the inability of these models to explain the dynamics of business investment series.

The out-of-sample dynamic forecasts derived from these models capture well the behaviour of the various categories of business investment over the 1990-1994 period. The out-of-sample forecasts produced by these models are also unbiased as suggested by very low bias proportions associated with their Theil inequality coefficients. It is interesting to note that the inability of the investment models to reproduce the dynamics of investment is not increased by moving from in-sample to out-of-sample simulations.

One well-known business cycle stylized fact is that the volatility of investment is larger than the volatility of output. There are also theoretical reasons to expect investment to react more rapidly to output shocks than to relative price changes. Thus, we expect the short-run response of investment to be larger than its ultimate long run response for output shocks but not for relative

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[28] In this function, the parameter of lagged rent expenditures is constrained to 0.9946, which is 1 minus the depreciation rate of residential investment, as dictated by the theoretical structure of the sector.

price shocks. This is effectively the case in CEFM96, since, according to the estimated business investment functions, investment responds much more rapidly to changes in output than to changes in real user costs.[29] Half the adjustment in investment to an output shock is completed in the quarter following the shock for both M&E and construction. In the case of a real user-cost shock, half the adjustment in investment is completed only after 8 and 15 quarters for M&E and construction, respectively. In the case of M&E, the difference is also evident from the fact that investment overshoots in response to an output shock but not in response to a real user-cost shock. Business investment in construction does not overshoot in the short run in response to a pure output shock. However, if we allow the output gap to change temporarily in response to an output shock, business investment in construction overshoots, while this behaviour is reinforced for M&E.

3.3 Trade Flows and Balance of Payments

There are 11 estimated equations in this block of which 6 model exports and imports for three separate categories: commodities, end products, and services. The other 5 equations model the stock of domestic assets held by foreigners, implicit rates of returns on domestic assets held by foreigners and on foreign assets held by Canadians, dividend payments to foreigners, and the Canada-U.S. exchange rate. The statistical documentation of these estimated equations is contained in Table 3.3 and Chart 3.

In general, residual-based diagnostic tests indicate that these regression models do not suffer from any obvious misspecification problems. There are, however, symptoms of autocorrelated residuals for imported end products, exported services, the stock of domestic assets held by foreigners, and exchange rate regressions. The Jarque-Bera test also suggests strongly that the residuals from both implicit rate-of-return models are abnormal.

Most of these equations perform well in static and dynamic in-sample simulations, as indicated by average absolute errors generally around 2 per cent. The only regression that diverges substantially from that general pattern is the one for dividend payments. The relatively poor fit of that equation reflects mainly large swings in the growth of dividend payments, as indicated by a standard deviation of 22 per cent. The goodness-of-fit of the equations for the stock of domestic assets held by foreigners and the exchange rate also deteriorates significantly when we move from static to dynamic simulations.

Specification problems associated with some of these equations show up more clearly in out-of-sample dynamic simulations. One sector that may be affected by misspecifications is the import side, namely the imports of commodities and end products. Over a five-year horizon, these functions underestimate systematically by 5 to 6 per cent, on average. Shortening the forecast horizon to one year greatly reduces this problem for imports of end products but not for commodities. Another key equation that does not perform well in this forecasting exercise is the

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[29] The following discussion is limited to business investment in M&E and construction. The error-correction model for business inventories is not used directly in the model but only indirectly to determine the long-run equilibrium value of the inventory stock.

exchange rate function. Although the model tracks the exchange rate well up to mid-1992, it is unable to foresee the large depreciation observed thereafter in the five-year out-of-sample dynamic simulation. Going from a five-year to a one-year forecast horizon, however, reduces the size of the error.

As we see for business investment, aggregate imports and exports also overshoot in the short run with respect to activity but not with respect to relative prices. The short-run response of imports and exports to activity is larger than the response in the long run for all categories but imported commodities. In contrast, the short-run response of exports and imports to relative prices is smaller than the long-run response for all categories but exported end products. The magnitude of this overshooting behaviour is also similar on both trade sides since, at the aggregate level, the activity elasticity is 60 per cent higher in the short run than in the long run for imports and exports. This is similar to results obtained by Masson, Symansky, and Meredith (1990) for many countries, including Canada.

In the long run, price elasticities are between -0.30 and -1.53, while activity elasticities vary between 1.00 and 1.47. Using current import and export weights, long-term activity and demand (relative and absolute) price elasticities are, respectively, 1.13 and -0.69 for total imports and 1.30 and -0.93 for total exports. The supply price elasticity for export of commodities is -0.44. It is interesting to note that our aggregate import price elasticity is virtually the same as the estimates obtained in such recent studies as Asseery and Peel (1992) and Deyak, Sawyer, and Sprinkle (1993). In contrast, our aggregate import activity elasticity is lower than that found historically in estimated Canadian demand for imports.[30] This suggests that our approach to measuring activity for import functions[31] helps in resolving the long-lasting problem in macroeconometric models of having estimated above-unity activity elasticities.[32]

3.4 Labour Market

There are only three estimated equations in the labour market sector that model employment in the commercial sector, average weekly hours in the commercial sector, and the overall economy participation rate. The employment level is normalized by the labour force such that an employment rate equation is estimated instead of an employment equation. Similarly, the average weekly hours and the participation rate are presented as deviations from their respective trend values.

As can be seen from the statistical results presented in Table 3.4 and Chart 4, these equations perform quite well. This is particularly true for hours and participation rate equations, which have well-behaved residuals and produce unbiased and precise out-of-sample forecasts. In

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[30] See Asseery and Peel (1992), Deyak, Symansky, and Meredith (1993), and the studies they survey.

[31] See Robidoux and Wong (1998), subsection 5.1, for more details on the definition of activity variables.

contrast, the employment equation has autocorrelated and heteroscedastic residuals and forecasts with bias. This bias in out-of-sample dynamic simulation is small, however, over the five-year forecast horizon, the absolute error averages to 0.44 per cent of the employment level.

3.5 Supply Side

Similar to the labour market sector, the supply side of CEFM96 contains very few, but key, stochastic equations. There is one equation for the commercial real GDP at factor cost and one for the price deflator for GDP at factor cost. The estimation results are contained in Table 3.5 and Chart 5.

The battery of diagnostic tests performed detect the presence of abnormal and heteroscedastic residuals in the output equation, but cannot detect any problems in the price equation. As can be seen in Chart 5, both models track well in out-of-sample dynamic forecast mode. The price model predicts without bias, while the output model tends to overpredict over the 1990-1994 period. For the employment rate equation, however, this bias is small since the absolute error averages to 0.7 and 0.4 per cent over the five-year and one-year forecast horizon, respectively.

3.6 Transaction and Factor Prices

We model 15 transaction and factor prices through stochastic equations. The transaction prices include four consumer prices, three investment prices, two government expenditure prices, and four export and import prices. Factor prices include the price of natural resources and the commercial-sector hourly market wage rate. Business investment prices are also input in the construction of a fixed-weight investment price index used as the price of capital in the aggregate cost index. These prices do not all have the same importance in the model. Key prices are factor prices and the price deflator for (total) consumption. Import and export prices also play an important role in determining real and nominal trade flows.

As Table 3.6 shows, diagnostic and specification tests detect various residual anomalies in more than half of these price equations. Fortunately, the key transaction and factor price equations generally appear to be less affected than the utility transaction prices. Nevertheless, the out-of-sample dynamic forecasts generated by these equations over the 1990-1994 period track the actual price series relatively well. For a number of prices, however, we diverge substantially from actual series over a five-year forecast horizon. These prices include the deflator for energy consumption, the deflator for M&E investment, the deflators for exports and imports of commodities, and the wage rate.

The inability to track wages and the M&E deflator over the longer term greatly reduces the model's capacity to predict inflation at the same horizon, since these two factor prices play a key role in determining prices. The poor performance of the wage-rate equation in the long term reflects the well-known instability of the unemployment gap coefficient in Phillips curves. In the case of the M&E deflator, the forecast series diverge from the actual one because it is difficult to model quality adjustments made by Statistics Canada for goods such as computers. It is

comforting, however, to see that these equations are able to reproduce fairly well the dynamics of the wage rate and the M&E deflator one-year ahead.

3.7 Income Sector

In the income sector, capital consumption allowances, current transfers from persons to corporations and from corporations to persons, net rental income of non-farm unincorporated business, net income of non-farm unincorporated business, and mortgage interest payments are determined by stochastic equations. These seven income flows are used mainly in the calculation of various income identities defined in the National Income and Expenditure Accounts.

The empirical results obtained with these income equations are presented in Table 3.7. Some of these equations exhibit abnormal, heteroscedastic, or autocorrelated residuals. Some of them also produce biased forecasts over one-year or five-year horizons. As can be seen in Chart 7, over a five-year forecast horizon this problem is particularly marked for net income of non-farm unincorporated business, net rental income of non-farm unincorporated business, and current transfers from corporations to persons. Fortunately, the size of this bias in the forecast mode is reduced substantially by shortening the forecasting horizon.

3.8 Financial Markets

Variables of financial markets that are modelled via estimated equations include demands for five types of assets as well as 11 interest rates. Interest rate equations are simple term structure models where, for the most part, rates are linked to the 90-day commercial paper rate and to U.S. interest rates. The empirical results generated by these equations are presented in Table 3.8 and Chart 8.

Although diagnostic tests detect many problems in residuals from interest rate equations because of their simple linear form, most of these equations generate unbiased and precise out-of-sample short- and long-run forecasts over the 1990-1994 period. In addition, for interest rate models that produce a relatively biased forecast according to the decomposition of the Theil inequality coefficient, this bias is small. In fact, for all interest rate models the mean absolute error over a one-year or a five-year forecast horizon is never more than 57 basis points.

The results of residual-based diagnostic tests for asset demand equations suggest that they are more accurate in statistical terms than are interest rate equations. In addition, the performance of the M1 money demand equation in our out-of-sample dynamic forecast exercise is quite good, as we see in Chart 8. The long-term forecasting performance of other asset demand models is weaker, however.

3.9 Federal Personal Income Tax

There are 15 estimated equations in the federal personal income tax (PIT) block. In contrast to most other sectors, for the federal PIT the equations are estimated with annual data,

and the sample periods all end in 1993 instead of 1994. The results are presented in Table 3.9 and Chart 9.

As Table 3.9 shows, most of these equations depict well-behaved residuals according to the battery of tests performed. For example, the presence of autocorrelated residuals of order one is found in only three equations of the PIT block. In contrast, the bias proportion in the decomposition of the Theil inequality coefficient is large for most of these equations. For most of them, however, this bias is small according to the value of the mean absolute error. The mean absolute error over the four-year forecasting horizon exceeds 3 per cent only for CPP/QPP benefits, net farming and fishing income, investment income, registered pension plan contributions, and capital gains exemptions.

3.10 Federal Corporate Tax

The modelling of the federal corporate tax sector is based on 17 stochastic equations. As in the personal income tax sector, annual data up to 1993 are used in estimation. The empirical results are collected in Table 3.10 and Chart 10.

The first result to stress is the quality of the statistical specifications. In almost all equations, the battery of residual-based diagnostic tests suggests no misspecification. In contrast, the out-of-sample dynamic forecast tests suggest that about half of these equations predict with bias. In most of them, however, the bias is relatively small, as suggested by low mean absolute percentage errors. The only notable exceptions are expenditures qualifying for the non-scientific research and experimental development investment tax credit, the cumulative Canadian exploration expenses opening balance, and the resource allowance. The difficulties in forecasting these variables reflect the complexity of the tax system for corporations.

3.11 Other Federal Government Revenues and CPP/QPP

Four additional stochastic equations are used to calculate miscellaneous federal government revenues. These equations model gasoline tax revenues, UI insurable labour income, contributions to the UI fund, non-resident withholding tax revenues, and capital consumption allowances. Finally, the CPP/QPP sector contains two stochastic equations that model contributions to CPP and QPP, respectively. The empirical results documenting these equations are presented in Table 3.11 and Chart 11. In general, these equations track the actual series reasonably well.

3.12 PLH Sector

Twelve components of the PLH sector are modelled with stochastic equations. These estimated equations determine expenditures, revenues, and effective rate of returns. The empirical results associated with these equations are shown in Table 3.12 and Chart 12. In general, these equations track the actual series reasonably well. As in most sectors, however, there is room for improvement. On the expenditure side, for example, the specification used for transfers to persons for direct relief is unable to reproduce the upward trend observed in the

1990s in dynamic simulations. On the revenue side, direct taxes on corporate and government business enterprises are overestimated on average by 10 per cent through the 1990s.

4 CONCLUDING REMARKS

In this paper we document the specification of stochastic equations used in CEFM96. In addition to the usual regression results, we report residual-diagnostic tests and dynamic simulations for each equation. For key relationships in the model, we also apply recent econometric findings in time-series analysis to develop error-correction models. In our view, this methodological approach improves the underlying statistical foundations of the model as well as its ability to forecast properly.

One advantage of this approach over the standard regression report usually provided with macroeconometric models is that it draws a more complete picture of the empirical specification. For example, it is clear from the results presented that the specifications used to determine wages, imports, and the exchange rate deserve further work.

Finally, the approach developed in this paper can be extended in many ways. As an example, the single-equation simulation analysis can be applied at the sectoral level. The examination of more advanced estimators, such as instrumental variable estimators, would also be a natural extension to the least squares method used in this version of the model.

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Annex 1
Variable Description List

Mnemonic	Description	Units	SA/Raw	Type
C	Total consumer expenditure on goods and services	Millions of $	SAAR	Ident
C86	Constant dollar total consumer expenditure on goods and services	Millions of 1986 $	SAAR	Stoc
CFUEL	Consumption of fuel in Canada	Mega-litres	SA	Stoc
CNDEN	Consumer expenditures on non-durables – energy	Millions of $	SAAR	Ident
CNDF	Consumer expenditures on non-durables – food	Millions of $	SAAR	Ident
COMPUTER	Index of technological change	1980=0.01		Exog
CORCPP	Correction factor to convert retirement maximum Canada pension plan benefits to average benefits	Ratio	NSA	Exog
CORFA	Correction factor for family allowance	Ratio	NSA	Exog
CORGIS	Correction factor to convert maximum guaranteed income supplement payments to average payments	Ratio	NSA	Exog
COROAS	Correction factor to convert maximum old age security benefits to average benefits	Ratio	NSA	Exog
CORQPP	Correction factor to convert retirement maximum Quebec pension plan benefits to average benefits	Ratio	NSA	Exog
CORSA	Correction factor to correct maximum spousal allowances to average allowances	Ratio	NSA	Exog
COST	Domestic cost index	1986=1	NSA	Stoc
CPPMAXM	Retirement maximum monthly Canada pension plan benefits	Dollars	NSA	Ident
CPPNETCH	The federal government's borrowing from the Canada pension plan (Canada pension plan investment fund and Canada pension plan account)	Millions of $	NSA	Exog
CPPOPQ	Number of recipients of Canada pension plan benefits	Millions of persons	NSA	Exog
CRENT	Consumer expenditure on imputed and paid rent (gross rent)	Millions of $	SAAR	Ident
CRENT86	Consumer expenditure on imputed and paid rent	Millions of 1986 $	SAAR	Stoc
CSB	Outstanding stock of Canada savings bonds, par value	Millions of $	NSA	Exog
DDATE	Dummy variable with value of 1947.1 in 1947q1, 1947.2 in 1947q2, 1947.3 in 1947q3,etc.	Unit	NSA	Exog
DFACTOR	Adjustment factor for other personal investment income equation	Ratio	NSA	Exog
DFGB	Deficits of government business enterprises	Millions of $	NSA	Exog
DFT	Personal fixed-term deposits at chartered banks, trust companies, and credit unions	Millions of $	NSA	Stoc
DLICA	Implicit stock of life insurance company assets	Millions of $	NSA	Stoc
DM1Y	M1 monetary aggregate	Millions of $	SAAR	Stoc
DM2Y	M2 monetary aggregate	Millions of $	SAAR	Stoc
DNC	Personal non-chequable saving deposits at chartered banks, trust companies, and credit unions	Millions of $	NSA	Stoc
EDNDC	Effective excise duty rate on real consumption expenditures excluding rent	Ratio	NSA	Exog
EDUTYRQ	Average effective duty rate on imports excluding the MTN tariff reductions	Ratio	NSA	Exog
EFSTAT	Portion of C-CRENT subject to special federal sales tax rate on alcohol and tobacco	Ratio	NSA	Exog
EFSTBCO	Portion of consumption expenditures subject to special federal sales tax rate on telecommunication services	Ratio	NSA	Exog
EMSRCO	Portion of consumption expenditures excluding rent entitle to GST rebate	Ratio	NSA	Exog
EMSRGCF	Portion of government gross fixed capital formation entitle to the GST rebate	Ratio	NSA	Exog
EMSRGCFP	Proportion of gross capital formation by municipalities, schools and hospitals that is rebatable	Ratio	NSA	Exog
EMSRGCGS	Portion of government expenditure on goods and services entitle to GST rebate	Ratio	NSA	Exog
EMSRGGSP	Proportion of expenditure on current goods and services by municipalities, schools and hospitals that is rebatable	Ratio	NSA	Exog
EMSRIME	Proportion of GST payable that is rebated to universities and businesses on purchases of machinery and equipment	Ratio	NSA	Exog
EMSRINRC	Proportion of GST on non-residential construction that is rebated to business and universities	Ratio	NSA	Exog
EMSRRC	Portion of residential construction investment entitle to GST rebate	Ratio	NSA	Exog
EMSTCO	Portion of consumption expenditures excluding rent subject to the GST	Ratio	NSA	Exog
EMSTEN	Portion of energy consumption expenditure subject to the GST	Ratio	NSA	Exog
EMSTFOOD	Portion of food consumption subject to the GST	Ratio	NSA	Exog
EMSTGCF	Portion of government gross fixed capital formation subject to the GST	Ratio	NSA	Exog
EMSTGCFF	The portion of federal fixed capital formation subject to the GST	Ratio	NSA	Exog
EMSTGCFP	Proportion of gross capital formation by municipalities, schools and hospitals that is taxable	Ratio	NSA	Exog
EMSTGCGS	The portion of GCGS subject to the goods and services tax	Ratio	NSA	Exog

Mnemonic	Description	Units	SA/Raw	Type
EMSTIME	Proportion of investment in machinery and equipment by universities and non-profit organizations subject to the GST	Ratio	NSA	Exog
EMSTINRC	Proportion of non-residential construction investment by universities and non-profit organizations subject to the GST	Ratio	NSA	Exog
EMSTRC	Portion of residential construction investment subject to the GST	Ratio	NSA	Exog
EMSTRENT	Portion of rent subject to the GST	Ratio	NSA	Exog
EMTGCGSF	Proportion of federal expenditures on goods and services subject to the GST	Ratio	NSA	Exog
EMTGCGSP	Proportion of provincial expenditures on goods and services subject to the GST	Ratio	NSA	Exog
EOEOTH	Effective ad valorum excise tax rate on consumption expenditures excluding rent	Ratio	NSA	Exog
EOEOTH86	Effective "specific" excise tax rate on constant dollar consumption expenditures excluding rent	Ratio	NSA	Exog
EOESIN	Effective alcohol and tobacco excise tax rate	Ratio	NSA	Exog
EOEXALC	Portion of other excise tax revenues accounted for by excise taxes on alcohol	Ratio	NSA	Exog
EOEXTOB	Portion of other excise tax revenues accounted for by excise taxes on tobacco products	Ratio	NSA	Exog
ESDIEFAR	Portion of fuel consumption entitle to the diesel fuel rebate for the farming industry	Ratio	NSA	Exog
ESDIEOTH	Portion of fuel consumption entitle to the diesel fuel rebate for other primary producers	Ratio	NSA	Exog
ESFBMNR	Portion of non-residential construction investment subject to the federal sales tax on building materials	Ratio	NSA	Exog
ESFBMR	Portion of residential construction investment subject to the federal sales tax on building materials	Ratio	NSA	Exog
ESFFD	Portion of food expenditures subject to the general federal sales tax rate	Ratio	NSA	Exog
ESFGCF	Portion of government gross fixed capital formation subject to the federal sales tax (general rate)	Ratio	NSA	Exog
ESFGCGS	Portion of government expenditures on goods and services subject to the federal sales tax (general rate)	Ratio	NSA	Exog
ESFIME	Portion of investment on M&E subject to the general federal sales tax rate	Ratio	NSA	Exog
ESFRENT	Portion of rent subject to the federal sales tax (general rate)	Ratio	NSA	Exog
ESFSTCO	Portion of consumption expenditures excluding rent subject to general federal sales tax	Ratio	NSA	Exog
ESFX	Portion of exports subject to the federal sales tax (general rate)	Ratio	NSA	Exog
ESGASFAR	Portion of fuel consumption entitle to the gasoline rebate for the farming industry	Ratio	NSA	Exog
ESGASNC	Portion of fuel consumption comprise of gasoline purchased for non-commercial uses	Ratio	NSA	Exog
ESGASOTH	Portion of fuel consumption entitle to the gasoline rebate for other primary producers	Ratio	NSA	Exog
EUICOV	Dummy variable to account for the phasing in provisions related to the extended coverage of unemployment insurance	Between 0 and 1	NSA	Exog
EXDALC	Portion of total excise duties arising from excise duties on alcohol products	Ratio	NSA	Exog
EXDTOB	Portion of total excise duties arising from excise duties on tobacco products	Ratio	NSA	Exog
FAINDXQ	Annual indexation factor for family allowances	Ratio	NSA	Ident
FAMAXM	Maximum monthly family allowance	Dollars	NSA	Ident
FAP	Net new PLH financial assets	Millions of $	NSA	Exog
FAPOPQ	Number of recipients of family allowances	Millions of persons	NSA	Exog
FLDISCP	Discrepancy in net new PLH financial liabilities	Millions of $	NSA	Exog
FLP	Net new PLH debt	Millions of $	NSA	Ident
G	Total government expenditure on current goods and services and capital formation	Millions of $	SAAR	Ident
G86	Constant dollar total government expenditure on current goods and services and capital formation	Millions of 1986 $	SAAR	Ident
GBAL	Total government national accounts balance	Millions of $	SAAR	Ident
GBALCPP	National accounts balance of the Canada pension plan	Millions of $	SAAR	Ident
GBALCQ	National accounts balance of the Canada and Quebec pension plans	Millions of $	SAAR	Ident
GBALF	National accounts balance for the federal government	Millions of $	SAAR	Ident
GBALP	National accounts balance for the PLH governments	Millions of $	SAAR	Ident
GBALQPP	National accounts balance of the Quebec pension plan	Millions of $	SAAR	Ident
GBNRCP	Canada pension plan transfers to non-residents	Millions of $	SAAR	Exog
GBTCPP	Canada pension plan benefits	Millions of $	SAAR	Ident
GBTQPP	Quebec pension plan benefits	Millions of $	SAAR	Ident
GCABF	Federal expenditures on capital assistance to business	Millions of $	SAAR	Exog
GCABP	PLH expenditures on capital assistance to businesses	Millions of $	SAAR	SR
GCAF	Federal expenditures on capital assistance	Millions of $	SAAR	Ident
GCAP	PLH expenditures on capital assistance	Millions of $	SAAR	Ident.

Mnemonic	Description	Units	SA/Raw	Type
GCAPF	Federal expenditures on capital assistance to persons	Millions of $	SAAR	Exog
GCAPP	PLH expenditures on capital assistance to persons	Millions of $	SAAR	SR
GCF	Total government gross fixed capital formation	Millions of $	SAAR	Ident.
GCF86	Total government fixed capital formation	Millions of 1986 $	SAAR	Ident.
GCFF	Federal fixed capital formation	Millions of $	SAAR	SR
GCFP	PLH gross capital formation	Millions of $	SAAR	SR
GCFTF	Federal investment in fixed capital and inventories (federal gross capital formation)	Millions of $	SAAR	Ident.
GCGS	Total government current expenditure on goods and services	Millions of $	SAAR	Ident.
GCGS86	Total government current expenditures on goods and services	Millions of 1986 $	SAAR	Ident.
GCGSF	Federal expenditures on current goods and services	Millions of $	SAAR	Ident.
GCGSP	PLH current expenditures on goods and services	Millions of $	SAAR	Ident.
GCPQP	Total expenditures of the Canada and Quebec pension plans	Millions of $	SAAR	Ident.
GCUMBALC	Cumulative balance of the Canada pension plan	Millions of $	SAAR	Ident.
GCUMBALQ	Cumulative balance of the Quebec pension plan	Millions of $	SAAR	Ident.
GCURF	Federal government current expenditures	Millions of $	SAAR	Ident.
GCURP	PLH current expenditures	Millions of $	SAAR	Ident.
GGSCPP	Canada pension plan expenditures on goods and services	Millions of $	SAAR	Exog
GGSQPP	Quebec pension plan expenditures on goods and services	Millions of $	SAAR	Exog
GI3SAF	Interest accruals on the public service superannuation account, the Canadian forces superannuation account and the R.C.M.P. superannuation account	Millions of $	NSA	SR
GIBCSBF	Bonus interest on Canada savings bonds	Millions of $	NSA	Exog
GICBRF	The change in borrowing resulting from changes in financial requirements other than interest on the public debt	Millions of $	NSA	SR
GICCSBF	Compound interest on old compound interest Canada savings bonds series	Millions of $	NSA	Exog
GICPFF	Interest on the Canada pension plan investment fund	Millions of $	NSA	Exog
GICPPOBF	Interest on the CPP operating balance	Millions of $	NSA	Exog
GICSBF	Interest on Canada savings bonds	Millions of $	NSA	SR
GICSBNOF	Interest on Canada savings bonds with no guaranteed floor interest rates	Millions of $	NSA	Exog
GICSBRF	The effect on interest of changes in Canada savings bond interest rates	Millions of $	NSA	SR
GIFBD2F	Interest on U.S. dollar denominated bond issues	Millions of $	NSA	SR
GIFBD3F	Interest on foreign bond issues denominated in currencies other than U.S. dollars	Millions of $	NSA	SR
GIFBF	Interest on foreign bond issues and standby credits	Millions of $	NSA	Ident.
GIFRTBF	The first round effect on interest of alternative interest rate assumptions	Millions of $	NSA	SR
GIIBFF	Interest on Indian band funds	Millions of $	NSA	Exog
GIMBF	Interest on domestic marketable bonds	Millions of $	NSA	SR
GIMISLF	Interest on all other liabilities	Millions of $	NSA	SR
GIMISPF	Interest accruals on the public services death benefit account, the regular forces death benefit account and the members of parliament retiring allowances account	Millions of $	NSA	Exog
GIODTF	Interest on other deposit and trust accounts	Millions of $	NSA	Exog
GIPHF	Interest on public-held funds	Millions of $	NSA	Ident.
GISINDXQ	Quarterly indexation factor for the guaranteed income supplement	Ratio	NSA	Ident.
GISMAXM	Maximum monthly guaranteed income supplement	Dollars	NSA	Ident.
GISPOPQ	Number of recipients of guaranteed income supplement	Millions of persons	SAAR	Exog
GISRBAF	Interest credited to the supplementary retirement benefits accounts	Millions of $	NSA	SR
GISTDBYF	Interest on standby credits	Millions of $	NSA	Exog
GITB180	Interest on 182-day treasury bills	Millions of $	NSA	Exog
GITB365	Interest on 364-day treasury bills	Millions of $	NSA	Exog
GITB91	Interest on 91-day treasury bills	Millions of $	NSA	Exog
GITBF	Interest (or discount) on treasury bills	Millions of $	NSA	SR
GITCBRF	The total effect on interest of changes in borrowing requirements	Millions of $	NSA	Ident.
GITTBF	The total effect on interest of alternative interest rate assumptions	Millions of $	NSA	SR
GNW	Total government current expenditures on non-wage goods and services	Millions of $	SAAR	Ident.
GNW86	Total government current expenditures on non-wage goods and services	Millions of 1986 $	SAAR	Ident.
GNWOF	Federal current expenditures on goods and services, non-wage goods and services excluding capital consumption allowances	Millions of $	SAAR	SR
GNWOP	PLH current expenditures on goods and services, non-wage goods and services excluding capital consumption allowances	Millions of $	SAAR	SR
GSAGRF	Federal subsidies to agriculture	Millions of $	NSAAR	Exog

Mnemonic	Description	Units	SA/Raw	Type
GSCOMMF	Federal subsidies to communication	Millions of $	NSAAR	Exog
GSENERF	Federal subsidies to energy	Millions of $	NSAAR	Exog
GSOTHRF	Federal subsidies, other	Millions of $	NSAAR	Exog
GSTREBG	GST rebates to municipalities, schools, universities, hospitals and non-profit organizations	Millions of $	SAAR	Ident.
GSTREBH	GST rebates to new home buyers	Millions of $	SAAR	Ident.
GSTREVG	Indirect tax revenues, gross GST receipts	Millions of $	SAAR	Ident.
GSUBF	Federal expenditures on subsidies	Millions of $	SAAR	Ident.
GSUBP	PLH subsidies to business and persons	Millions of $	SAAR	SR
GTNRF	Federal transfers to non-residents	Millions of $	SAAR	SR
GTOTF	Total federal government expenditures	Millions of $	SAAR	Ident.
GTOTP	PLH total expenditures	Millions of $	SAAR	Ident.
GTPCHILD	Federal expenditures, child benefits package	Millions of $	SAAR	SR
GTPEDP	PLH transfers to persons, post-secondary education	Millions of $	SAAR	Stoc
GTPFAF	Federal expenditure on family allowances	Millions of $	NSA	Ident.
GTPFANR	Family allowance benefits paid to non-residents	Millions of $	SAAR	Exog
GTPINF	Federal government interest on the public debt	Millions of $	SAAR	Ident.
GTPINFQ	Federal government interest on the public debt, on a quarterly basis	Millions of $	NSA	Ident.
GTPINP	PLH interest on the public debt	Millions of $	SAAR	Ident.
GTPOAF	Federal expenditure on old age security	Millions of $	NSA	Ident.
GTPOANR	Benefits paid to non-residents for old age security, guaranteed income supplement and spousal allowances	Millions of $	SAAR	Exog
GTPOTF	Federal other transfers to persons	Millions of $	SAAR	SR
GTPOTP	PLH transfers to persons, other	Millions of $	SAAR	Ident.
GTPPF	Federal expenditures on pensions	Millions of $	SAAR	Exog
GTPRELP	PLH transfers to persons, direct relief	Millions of $	SAAR	Stoc
GTPUIBF	Unemployment insurance benefits	Millions of $	SAAR	SR
GTPUIGF	Government share of unemployment insurance benefits	Millions of $	SAAR	SR
GTRPF	Federal expenditures on transfers to persons	Millions of $	SAAR	Ident.
GTRPP	PLH transfers to persons, total	Millions of $	SAAR	Ident.
GW	Total government wages, salaries and supplementary labour income	Millions of $	SAAR	Ident.
GW86	Total government wages, salaries and supplementary labour income	Millions of 1986 $	SAAR	Ident.
GWF	Federal expenditures on wages, salaries and supplementary labour income	Millions of $	SAAR	SR
GWP	PLH current expenditures on wages and salaries and supplementary labour income	Millions of $	SAAR	SR
IBAE86	Adjusting entry – business fixed capital investment	Millions of 1986 $	SAAR	Exog
IEN	Total energy investment	Millions of $	SAAR	Ident.
IIAHP	Average holding period for business inventories	Ratio	NSA	Exog
IME	Total business investment in machinery and equipment	Millions of $	SAAR	Ident.
IME86	Total business investment in machinery and equipment	Millions of 1986 $	SAAR	Stoc
INRC	Total business non-residential construction	Millions of $	SAAR	Ident.
INRC86	Total business investment in non-residential construction	Millions of 1986 $	SAAR	Stoc
INVB	Value of physical change in business inventories	Millions of $	SAAR	Ident.
INVB86	Value of physical change in business inventories	Millions of 1986 $	SAAR	Ident.
INVG	The change in the value of federal government inventories	Millions of $	SAAR	SR
INVG86	Value of physical change in government inventories	Millions of 1986 $	SAAR	Exog
IRC	Total residential investment	Millions of $	SAAR	Ident.
IRC86	Total residential investment	Millions of 1986 $	SAAR	Ident.
KACCLCF	Stock of losses carried forward	Millions of $	NSA	Ident.
KCPPNET	Cumulated federal government borrowings from the Canada pension plan (Canada pension plan investment fund and Canada pension plan account)	Millions of $	NSA	Ident.
KFAP	Stock of PLH financial assets (before valuation adjustments)	Millions of $	NSA	Exog
KFLP	Cumulated net new PLH debt	Millions of $	NSA	Ident.
KFMBBC	Stock of federal marketable bonds held by the bank of Canada	Millions of $	NSA	Exog
KFMBGR	Stock of gross issues of domestic marketable bonds	Millions of $	NSA	Exog
KFMBGREX	Stock of gross issues of extendible marketable bonds	Millions of $	NSA	Exog
KFTBBC	Stock of treasury bills held by the bank of Canada	Millions of $	NSA	Exog
KGBALC	Ten year cumulative balance in Canada pension plan lagged ten years	Millions of $	SAAR	Exog
KIA	Canada's international investment position - total assets	Millions of $	NSA	Idnet
KIL	Canada's international investment position - total liabilities	Millions of $	NSA	Stoc

Mnemonic	Description	Units	SA/Raw	Type
KIME	The stock of real business investment in machinery and equipment	Millions of 1986 $	SA	Ident.
KINRC	The stock of real business investment in non-residential construction	Millions of 1986 $	SA	Ident.
KINVB	Stock of non-farm inventories	Millions of 1986 $	SA	Ident.
KINVBD	Desired stock of non-farm inventories	Millions of 1986 $	SA	Stoc
KRGCBC	Cumulative interest weighted balance of the Canada pension plan	Millions of $	SAAR	Exog
LDGAP	Indicator of output gap	Ratio	SAAR	Ident.
LF	Civilian labour force	In thousands	SAAR	Ident.
LFAH	Total average weekly hours - commercial and non-commercial sectors	Hours	SAAR	Ident.
LFAHC	Average weekly hours in the commercial sector	Hours	SAAR	Stoc
LFAHCN	Normal average weekly hours in the commercial sector	Hours	SAAR	Exog
LFAHNC	Average weekly hours in the non-commercial sector	Hours	SAAR	Exog
LFC	Estimated commercial sector labour force	In thousands	SAAR	Ident.
LFE	Total civilian employment	In thousands	SAAR	Ident.
LFEC	Employment in the commercial sector	In thousands	SAAR	Stoc
LFECPOT	Potential employment in the commercial sector	In thousands	SAAR	Ident.
LFENC	Employment in the non-commercial sector	In thousands	SAAR	Ident.
LFNE	Natural level of employment	In thousands	SAAR	Ident.
LFNEC	Natural level of employment, commercial sector	In thousands	SAAR	Ident.
LFNENC	Natural level of employment, non-commercial sector	In thousands	SAAR	Ident.
LFNU	Natural level of unemployment	In thousands	SAAR	Ident.
LFNUR	The natural rate of unemployment	Percent	SAAR	SR
LFPOP	Labour force source population	In thousands	SAAR	Exog
LFPOPOW	Female population ages 55 and over	In thousands	NSA	Exog
LFPOPPW	Female population ages 25 to 54	In thousands	NSA	Exog
LFPOT	Potential labour force	In thousands	SAAR	Ident.
LFPR	Aggregate participation rate	Percentage	SAAR	Stoc
LFPRODC	Hourly labour productivity in the commercial sector	$Thousands per hour	NSA	Ident.
LFPROWT	Trend participation rate for women age 55 and over	Percentage	SAAR	Exog
LFPRPWT	Trend participation rate for women ages 25 to 55	Percentage	SAAR	Exog
LFPRT	Aggregate trend participation rate	Percentage	SAAR	Exog
LFPRYMT	Trend participation rate for men ages 15 to 24	Percentage	SAAR	Exog
LFPRYWT	Trend participation rate for women ages 15 to 24	Percentage	SAAR	Exog
LFU	Number of unemployed, age 15 years and over	In thousands	SAAR	Ident.
LFUR	Unemployment rate for age 15 years and over	Percentage	SAAR	Ident.
LRPET	Trend relative price of energy		NSA	Exog
LTOTT	Trend terms of trade		NSA	Exog
LUIGEN	Index of UI generosity, replacement rate	Ratio	NSA	Exog
LUNION	Proportion of labour force in unions	Ratio	SAAR	Exog
LWGAP	Gap between current and warranted real wages	Ratio	NSA	Ident.
M	Total imports of goods and services	Millions of $	SAAR	Ident.
M86	Total imports of goods and services	Millions of 1986 $	SAAR	Ident.
MAE86	Adjusting entry – imports of goods and services	Millions of 1986 $	SAAR	Exog
MC86	Imports of commodities	Millions of 1986 $	SAAR	Stoc
MCACT	Import activity: commodity	Millions of 1986 $	SAAR	Ident.
MCI	Monetary condition index	1987.1=0	NSA	Ident.
MG	Total imports of merchandise goods	Millions of $	SAAR	Ident.
MG86	Total imports of merchandise goods	Millions of 1986 $	SAAR	Stoc
MM86	Imports of end products	Millions of 1986 $	SAAR	Stoc
MMACT	Import activity: end products	Millions of 1986 $	SAAR	Ident.
MRETAIN	Payment of reinvested earnings to non-residents	Millions of $	SAAR	Exog
MS	Total imports of services	Millions of $	SAAR	Ident.
MS86	Total imports of services	Millions of 1986 $	SAAR	Stoc
MSACT	Import activity: services	Millions of 1986 $	SAAR	Ident.
MSD	Dividend payments to non-residents	Millions of $	SAAR	Stoc
MSIID	Investment income paid to non-residents	Millions of $	SAAR	Stoc
MSIIP	Undistributed corporate profits: interest and miscellaneous investment income paid to non-residents	Millions of $	SAAR	Ident.
MSSTBASE	Total goods and services tax base for consumer expenditures and private investment	Millions of $	SAAR	Ident.

Mnemonic	Description	Units	SA/Raw	Type
MTBASGP	GST base for municipalities, schools and hospitals	Millions $	NSA	Ident.
NETDEBCQ	Canada/Quebec pension plan net debt	Millions of $	Raw	Ident.
NETDEBT	Total government net debt	Millions of $	Raw	Ident.
NETDEBTF	Federal government net debt	Millions of $	Raw	Ident.
NETDEBTP	PLH net debt	Millions of $	Raw	Ident.
NETID	Net international assets	Millions of $	NSA	Ident.
NGQD	Natural gas production for domestic consumption	Bill. of cubic feet	NSA	Ident.
NGQDG	Growth in natural gas production for domestic consumption	Per cent	NSA	Exog
NGQX	Natural gas exports	Bill. of cubic feet	NSA	Ident.
NGQXG	Growth in natural gas exports	Per cent	NSA	Exog
NTAE86	Statistical discrepancy, real indirect taxes	Millions of $	SAAR	Exog
NTAX86	Real net indirect taxes	Millions of 1986 $	SAAR	Ident.
NX	Trade balance on goods and services	Millions of $	SAAR	Ident.
NX86	Constant dollar trade balance on goods and services	Millions of 1986 $	SAAR	Ident.
NXCA	Current account balance	Millions of $	SAAR	Ident.
NXG	Merchandise trade balance	Millions of $	SAAR	Ident.
NXG86	Constant dollar merchandise trade balance	Millions of 1986 $	SAAR	Ident.
NXIMF	Net inheritances and migrant's funds	Millions of $	SAAR	Exog
NXS	Trade balance on services	Millions of $	SAAR	Ident.
NXS86	Constant dollar trade balance on services	Millions of 1986 $	SAAR	Ident.
NXTR	Net current transfers from non-residents	Millions of $	SAAR	Ident.
OAINDXQ	Quarterly indexation factor for old age security	Ratio	NSA	Ident.
OASMAXM	Maximum monthly old age security benefits	Dollars	NSA	Ident.
OASPOPQ	Number of recipients of old age security benefits	Millions	NSA	Exog
OILQ	Total production of oil	Millions of barrels	NSA	Ident.
OILQG	Growth in the production of oil	Per cent	NSA	Exog
OPCOSTOG	Operating costs for oil and gas production	Millions of $	NSA	Exog
OSACFR86	Economic activity for France	1986 = 1.0	SAAR	Exog
OSACGR86	Economic activity for Germany	1986 = 1.0	SAAR	Exog
OSACIT86	Economic activity for Italy	1986 = 1.0	SAAR	Exog
OSACJA86	Economic activity for Japan	1986 = 1.0	SAAR	Exog
OSACUK86	Economic activity for United Kingdom	1986 = 1.0	SAAR	Exog
OSPACFR	Implicit deflator for economic activity for France	1986 = 1.0	SAAR	Exog
OSPACGR	Implicit deflator for economic activity for Germany	1986 = 1.0	SAAR	Exog
OSPACIT	Implicit deflator for economic activity for Italy	1986 = 1.0	SAAR	Exog
OSPACJA	Implicit deflator for economic activity for Japan	1986 = 1.0	SAAR	Exog
OSPACUK	Implicit deflator for economic activity for the United Kingdom	1986 = 1.0	SAAR	Exog
PC	Implicit price deflator for consumer expenditure on goods and services	1986 = 1.0	SAAR	Ident.
PCNDEN	Implicit price deflator for consumer expenditures on energy	1986 = 1.0	SAAR	Stoc
PCNDF	Implicit price deflator for consumer expenditures on food	1986 = 1.0	SAAR	Stoc
PCPI	Consumer price index, all items	1986 = 1.0	SAAR	Ident.
PCPIFACT	Seasonal adjustment factor for the total consumer price index variable	Ratio	NSA	Exog
PCPIPET	Consumer price index for petroleum products	1986 = 1.0	NSA	Ident.
PCPIR	Consumer price index, all items	1986 = 1.0	NSA	Ident.
PCPIXE	Consumer price index, all items excluding energy	1986 = 1.0	SAAR	Ident.
PCPIXFE	Consumer price index, all items excluding food and energy	1986 = 1.0	SAAR	Ident.
PCRENT	Implicit price deflator for consumer expenditure on rental services	1986 = 1.0	SAAR	Stoc
PE	Expected rate of inflation for consumers	Percent per annum	SAAR	Ident.
PEINV	Expected rate of inflation for inventories	Percent per annum	SAAR	Ident.
PFD	Implicit price deflator for final demand	1986 = 1.0	SAAR	Ident.
PFDD	Implicit price deflator for final domestic demand	1986 = 1.0	SAAR	Ident.
PFX	Average noon spot Canada-U.S. exchange rate	Cdn $ per us $	NSA	SR
PFXFRA	Average noon spot of Canada exchange rate with France	Cdn $ per French franc	NSA	Ident.
PFXG10	Canadian $ per G10 currencies (including U.S.)	1981 = 1.0	NSA	Ident.
PFXG9	Canadian $ per G-9 currencies (excluding U.S.)	1981 = 1.0	NSA	Ident.
PFXGER	Average noon spot of Canada exchange rate with Germany	Cdn $ per d mark	Raw	Ident.
PFXITA	Average noon spot of Canada exchange rate with Italy	Cnd $ per lira	NSA	Ident.
PFXJAP	Average noon spot of Canada exchange rate with Japan	Cdn $ per yen	Raw	Ident.

Mnemonic	Description	Units	SA/Raw	Type
PFXUK	Average noon spot of Canada exchange rate with United Kingdom	Cdn $ per pound	NSA	Ident.
PFXX	Exchange rate used under an exogenous exchange rate assumption	Cdn $ per US $	NSA	Exog
PGCF	Implicit price deflator for government investment on gross fixed capital formation	1986 = 1.0	SAAR	Stoc
PGDP	Implicit price deflator for gross domestic product	1986 = 1.0	SAAR	Ident.
PGDPC	Implicit price deflator for commercial sector gross domestic product	1986 = 1.0	SAAR	Ident.
PGDPFC	Implicit price deflator, gross domestic product at factor cost	1986 = 1.0	SA	Stoc
PGDPFCXX	Deflator for GDP at factor cost excluding export	1986=1		Stoc
PGNWO	Implicit price deflator for government expenditures on non-wage goods and services	1986 = 1.0	SAAR	Stoc
PGW	Implicit price index for government expenditure on the wage bill	1986 = 1.0	SAAR	Ident
PIME	Implicit price deflator for business investment in machinery and equipment	1986 = 1.0	SAAR	Stoc
PINRC	Implicit price deflator for business non-residential construction	1986 = 1.0	SAAR	Stoc
PINVB	Implicit price deflator, change in business inventories	1986 = 1.0	SA	Ident.
PIRC	Implicit price deflator for business investment on residential construction	1986 = 1.0	SAAR	Stoc
PKINVB	Implicit price deflator for the stock of non-farm inventories	1986 = 1.0	SAAR	Ident.
PM	Implicit price deflator for imports of goods and services	1986 = 1.0	SAAR	Ident.
PMC	Implicit deflator for commodity imports	1986 = 1.0	SAAR	Stoc
PMG	Implicit price deflator for imports of merchandise goods	1986 = 1.0	SAAR	Ident.
PMLS	MLS residential price	Dollars	NSA	Stoc
PMM	Implicit deflator for imports of end products	1986 = 1.0	SAAR	Stoc
PMS	Implicit price deflator for total service payments	1986 = 1.0	SAAR	Ident.
PNGD	Domestic price of natural gas	Dollars per TCF	NSA	Ident.
PNGDG	Growth in the domestic price of natural gas	Per cent	NSA	Exog
PNGX	Export price of natural gas	Dollars per TCF	NSA	Ident.
PNGXG	Growth in the export price of natural gas	Per cent	NSA	Exog
POILBLND	Blended price of reference quality oil at Toronto	Dollars per barrel	NSA	Ident.
POILL	Wellhead price of light crude oil	$ per barrels	NSA	Ident.
POP	Total population	In thousands	NSA	Exog
POP65UP	Population age 65 and over	In thousands	NSA	Exog
PRAW	Raw material price index	1986=1	NSA	Stoc
PRMC	Relative price of commodity imports	Ratio	NSA	Ident.
PRMM	Relative price of end product imports	Ratio	NSA	Ident.
PRMS	Relative price of service imports	Ratio	NSA	Ident.
PROPCPET	Proportion of total imports consisting of crude petroleum	Ratio	SA	Exog
PRXC	Relative price of commodity exports	Ratio	NSA	Ident.
PRXM	Relative price of end product exports	Ratio	NSA	Ident.
PRXS	Relative price of service exports	Ratio	NSA	Ident.
PTERMS	Terms of trade	1986 = 1	SAAR	Ident.
PTERMSG	Merchandise terms of trade	1986 = 1.0	SAAR	Ident.
PTERMSS	Service terms of trade	1986 = 1.0	SAAR	Ident.
PVCCAME	Present value of each dollar of future capital cost allowances for investment in machinery and equipment	Ratio	NSA	Ident.
PVCCANR	Present value of each dollar of future capital cost allowances for investment in non-residential construction	Ratio	NSA	Ident.
PWTI2	Price of West Texas Intermediate crude oil at Chicago	U.S.$ per barrels	NSA	Exog
PX	Implicit price deflator for exports of goods and services	1986 = 1.0	SAAR	Ident.
PXC	Implicit price deflator for commodity exports	1986 = 1.0	SAAR	Stoc
PXEN	Implicit price deflator for energy exports	1986=100	SA	Ident.
PXG	Implicit price deflator for exports of merchandise goods	1986 = 1.0	SAAR	Stoc
PXM	Implicit price deflator for end product exports	1986 = 1.0	SAAR	Stoc
PXNG	Implicit price deflator for natural gas exports	1986=100	SA	Ident.
PXOIL	Implicit price deflator for oil exports	1986=100	SA	Ident.
PXOILN	Implicit price deflator, oil exports	1986=1	SA	SR
PXS	Implicit price deflator for total service receipts	1986 = 1.0	SAAR	Stoc
PXW	Implicit price deflator for wheat exports	1986 = 1.0	SAAR	Exog
Q1	First quarter seasonal dummy variable	Binary	NSA	Exog
Q2	Second quarter seasonal dummy variable	Binary	NSA	Exog
Q3	Third quarter seasonal dummy variable	Binary	NSA	Exog
Q4	Fourth quarter seasonal dummy variable	Binary	NSA	Exog

Mnemonic	Description	Units	SA/Raw	Type
Q742	Dummy variable for the postal strike in 1974	Binary	NSA	Exog
Q754	Dummy variable for the postal strike in 1975	Binary	NSA	Exog
Q76M1	Dummy variable for consolidated corporate cash management programs introduced by chartered banks	Between 1 and 7	NSA	Exog
Q77	Dummy variable to account for the introduction of the inventory allowance deduction for corporations in 1977	Binary	NSA	Exog
Q784	Dummy variable for the postal strike in 1978	Binary	NSA	Exog
Q81	Dummy variable in the undepreciated capital cost deductions equation for 1981			
Q813	Dummy variable in the DM1Y equation	Binary	NSA	Exog
Q8182ALL	Dummy variable in the TPYBUS, TPYINV, TPDRRSP equations	Binary	NSA	Exog
Q81M1	Dummy variable in the DM1Y equation		NSA	Exog
Q81M2	Dummy variable in the DM2Y equation		NSA	Exog
Q81ON	Dummy variable in RCBNC equation	Binary	NSA	Exog
Q82ALL	Dummy variable to account for the high taxable proportion during the 1981-82 recession (1 in 1981 and 1982, zero otherwise)	Binary	Raw	Exog
Q83ALL	Dummy variable	Binary	NSA	Exog
Q84	Dummy variable in the rates of prior-year losses applied and current-year losses carried back equation for 1984	Binary		
Q84CPP	Dummy variable in the TCOCPP equation	Binary	NSA	Exog
Q85C	Dummy variable in book deprecation before claim equation for 1985	Binary		
Q881	Dummy for new legislation for the obligation for the employers to send to the government the employees deductions every two weeks rather than every month		NSA	Exog
Q89	Dummy variable in the undepreciated capital cost deductions equation and the capital gains equation for 1989	Binary		
Q90	Dummy variable in the undepreciated capital cost deductions equation and the capital gains equation for 1990	Binary		
Q90ALL	Dummy variable in the TPDRRSP equation	Binary	NSA	Exog
Q91	Dummy variable in the corporate taxable income equation for 1991	Binary		
Q92	Dummy variable in the corporate taxable income equation for 1992	Binary		
QAIB	Dummy variable to represent the influence of the AIB on wages	Between 0 and 1	Raw	Exog
QBASEIND	Base price index calculated as the sum of PCPIPET(i) i=-5 to -2, for the quarter where RSPHIST was last calculated	Index	NSA	Exog
QCPI4	Dummy variable to represent the period when the 1978 expenditure weights were used in the CPI	Binary	NSA	Exog
QCPI5	Dummy variable covering the period when the 1982 expenditure weights were used in the CPI	Binary	NSA	Exog
QCPI6	Dummy variable covering the period when the 1989 expenditure weights are used in the CPI	Binary	NSA	Exog
QCPI7	Dummy variable covering the period when the 1995 expenditure weights are used in the CPI	Binary	NSA	Exog
QCPIX6	Dummy variable in the PCPIXFE and PCPIXE equation: to terminate The 1989 weights	Binary		Exog
QCPIX7	Dummy variable in the PCPIXFE and PCPIXE equation: to switch to the 1995 weights	Binary		Exog
QEPF	Switch to turn off the EPF equations in 1996q2	Binary		Exog
QEPF96	Switch to turn on the Canada health and social transfer in 1996q2	Binary		Exog
QFTT	Adjustment for the impact of the Canada-us free trade agreement on the average duty rate on imports	Ratio	NSA	Exog
QMISC	Adjustment for the impact of miscellaneous policy initiatives on the average effective duty on imports	Ratio	NSA	Exog
QMS831	Dummy variable for the MS86 equation	Binary	NSA	Exog
QMS90	Dummy variable for the effect of GST and FTA in the ms86 equation	Between 0 and 1	NSA	Exog
QMTN1	Adjustment for the impact of Tokyo round of MTN reduction on the average effective duty rate on imports	Ratio	NSA	Exog
QMTN2	Adjustment for the impact of Uruguay round of MTN reduction on the average effective duty rate on imports	Ratio	NSA	Exog
QPFX76	Dummy variable in PFXE equation equal to 1 after 1976	Unit	Raw	Exog

Mnemonic	Description	Units	SA/Raw	Type
QPPMAXM	Retirement maximum monthly Quebec pension plan benefits	Dollars	NSA	Ident.
QPRAW	Dummy variable in the raw material price index equation	Binary	NSA	Exog
QPXC91	Dummy variable for a level correction in the PCX equation	Binary	NSA	Exog
QRATE	Dummy variable equal to one for specific rates already calculated	Binary	NSA	Exog
QSMIMEEA	Share of manufacturing investment in machinery and equipment eligible for accelerated depreciation	Ratio	NSA	Exog
QT0487	Dummy variable for chartered bank non-chequable savings deposit rate equation		NSA	Exog
QTCITCEN	Dummy variable to represent change in non-SR&ED ITC qualifying expenditure beginning in 1989	Binary		
QTIME	Time trend variable with 1955 q1 = 1	Binary	NSA	Exog
QTRCIT	Dummy variable to account for the phase-in of stage 1 of tax reform	Binary	NSA	Exog
QTYCCYL	Dummy variable in current-year losses equation for 1986	Binary	NSA	Exog
QTYCRA	Dummy variable in resource allowance equation for 1986	Binary		
QTYCROY	Dummy variable in provincial royalties equation for 1986 and afterwards	Binary		Exog
QUIC	Dummy variable to take account of changes instituted by the 1971 unemployment insurance commission	Ratio	NSA	Exog
RAD	Ad valorum federal sales tax inclusive of price on all fuels in effect before 1977 q2 and from 1982 q2 to 1985 q2 and still applies to aviation fuels	Ratio	NSA	Exog
RAVFMB	The average rate of interest on federal domestic marketable bonds	Percent	NSA	SR
RAVFTB	The average rate of interest on federal treasury bills	Percent	NSA	SR
RBANK	Bank rate	Percent per annum	NSA	Ident.
RBENCPP	Base rate used for the Canada and Quebec pension plans	Ratio	NSA	Exog
RBOND	Average yield on 10 provincial bonds calculated by Mcleod , Young, and Weir	Percent per annum	NSA	Stoc
RCBNC	Chartered bank non-chequable savings deposit rate	Percent per annum	NSA	Stoc
RCBP	Chartered bank rate on prime business loans	Percent per annum	NSA	Stoc
RCC	Rate of capital cost allowance	Ratio	NSA	Exog
RCCAME	Rate of capital cost allowance, machinery & equipment	Ratio	NSA	Exog
RCCAME29	Rate of capital cost allowance, machinery & equipment for class 29	Ratio	NSA	Exog
RCCAMUP	Capital consumption allowance mark-up factor	Ratio	NSA	Exog
RCCANR	Rate of capital cost allowance, non-residential structures	Ratio	NSA	Exog
RCIT	Average effective corporate tax rate for 1994	Ratio	SAAR	Exog
RCNDEN	Ratio of consumer energy expenditures to total consumer expenditures	Ratio	NSA	Exog
RCNDF	Ratio of consumer food expenditures to total consumer expenditures	Ratio	NSA	Exog
RCPQP	Employee contribution rate for the Canada and Quebec pension plans	Ratio	NSA	Exog
RCSB	Average effective Canada savings bond rate	Percent per annum	NSA	Ident.
RCUS	Average effective customs duties for 1994	Ratio	SAAR	Exog
RDIRC	Depreciation rate for housing stock	Ratio		Exog
RDME	Economic depreciation rate for the stock of machinery and equipment	Ratio	NSA	Exog
RDNRC	Economic depreciation rate for the stock of non-residential construction	Ratio	NSA	Exog
RDYTSE	Toronto stock exchange dividend yield ratio	Ratio	NSA	Stoc
REBDIEF1	The rebate rate per litre of diesel fuel for the farming industry	Ratio	NSA	Exog
REBDIEF2	The rebate rate per litre of diesel fuel for other primary producers	Ratio	NSA	Exog
REBGASF1	The rebate rate per litre of motor gasoline for the farming industry	Ratio	NSA	Exog
REBGASF2	The rebate rate per litre of motor gasoline for other primary producers	Ratio	NSA	Exog
RESCCVR	Residual in the TCITCCVR equation	Millions of $	NSA	Exog
RESCF1	Residual in the TCULCF1 equation	Millions of $	NSA	Exog
RESCFC0	Residual in the TCLCFC0 equation	Millions of $	NSA	Exog
RESCFC1	Residual in the TCLCFC1 equation	Millions of $	NSA	Exog
RESCFC2	Residual in the TCLCFC2 equation	Millions of $	NSA	Exog
RESCFC3	Residual in the TCLCFC3 equation	Millions of $	NSA	Exog
RESCFC4	Residual in the TCLCFC4 equation	Millions of $	NSA	Exog
RESCFC5	Residual in the TCLCFC5 equation	Millions of $	NSA	Exog
RESCFC6	Residual in the TCLCFC6 equation	Millions of $	NSA	Exog
RESCFOB	Residual in the TCLCFOB equation	Millions of $	NSA	Exog
RESCITC	Residual in the TCICT equation	Millions of $	NSA	Exog
RESCPPMA	Residual in the CPPMAXM identity	Dollars	NSA	Exog
RESCTAX	Residual in the TYCTAX equation	Millions of $	NSA	Exog
RESDUTYF	Residual in the TIEXDF identity	Millions of $	NSA	Exog

Mnemonic	Description	Units	SA/Raw	Type
RESFAIN	Residual in the FAINDXQ identity	Ratio	NSA	Exog
RESFEXP	Residual in the TCLCFEXP equation	Millions of $	NSA	Exog
RESFLP	Actual net new PLH financial liabilities less estimated liabilities	Millions of $	NSA	Exog
RESGISIN	Residual in the GISINDXQ identity	Ratio	NSA	Exog
RESGISMA	Residual in the GISMAXM identity	Ratio	NSA	Exog
RESGSTN	Residual in the TIMSTF identity	Millions of $	SAAR	Exog
RESGTFAF	Residual in the GTPFAF identity	Millions of $	NSA	Exog
RESGTOAF	Residual in the GTPOAF identity	Millions of $	NSA	Exog
RESKACC	Residual in the KACCLCF equation	Millions of $	NSA	Exog
RESMG86	Residual in the MG86 identity	Millions of 1986 $	SAAR	Ident.
RESNDEE	Residual in the TYCNDEE equation	Millions of $	NSA	Exog
RESNETID	Residual in the NETID equation	Millions of $	SAAR	Exog
RESOAIN	Residual in the OAINDXQ identity	Ratio	NSA	Exog
RESOASMA	Residual in the OASMAXM identity	Ratio	NSA	Exog
RESOEXF	Residual in the TIOEXF identity	Millions of $	NSA	Exog
RESPCPI	Residual in the PCPI equation	1986=1		Exog
RESPMG	Residual in the PMG identity	1986 = 1.0	SAAR	Exog
RESPMGS	Equals to RESPMG over history but endogenously determined over the forecast	1986 = 1.0	SAAR	Ident.
RESPXG	Residual in the PXG identity	1986 = 1.0	SAAR	Exog
RESPXGS	Equals RESPXG over the history but endogenous over the forecast.	1986 = 1.0	SAAR	Ident.
RESQPPMA	Residual in the QPPMAXM identity	Dollars	NSA	Exog
RESRBANK	Residual in the RBANK identity	Percent per annum	NSA	Exog
RESRSP	Residual variable in the specific federal sales tax rate on fuels (RSP)	Ratio	NSA	Exog
RESSLI	The portion of supplementary labour income not accounted for by employer contributions to the UI fund and employer contributions to the CPP/QPP	Millions of $	SAAR	SR
RESSLIP	The ratio of RESSLI to wages, salaries, and supplementary labour income	Ratio	SAAR	Exog
RESTAX	Residual indirect taxes	Millions of $	SAAR	Ident.
RESTINDX	Residual variable in the TINDEX equation	Unit:	NSA	Exog
RESTISF	Residual in the TISF equation	Millions of $	NSA	Exog
RESTPSRT	Residual variable in the TPSRTXF equation	Millions of $	NSA	Exog
RESTPY1B	Residual variable in the TPY1BF equation	Millions of $	NSA	Exog
RESTPY2B	Residual variable in the TPY2BF equation	Millions of $	NSA	Exog
RESTPY3B	Residual variable in the TPY3BF equation	Millions of $	NSA	Exog
RESTPY4B	Residual variable in the TPY4BF equation	Millions of $	NSA	Exog
RESTPY5B	Residual variable in the TPY5BF equation	Millions of $	NSA	Exog
RESTPY6B	Residual variable in the TPY6BF equation	Millions of $	NSA	Exog
RESTPYPA	Residual in the TPYPAYF equation	Millions of $	NSA	Exog
RESTPYTX	Residual in the TPYTAX equation	Millions of $	NSA	Exog
RESTTCBA	Residual variable in the TTCBASS equation	Dollars	NSA	Exog
RESTTCMA	Residual variable in the TTCMARS equation	Dollars	NSA	Exog
RESTTCOL	Residual variable in the TTCOLDS equation	Dollars	NSA	Exog
RESTTCTO	Residual in the TTCTOT identity	Millions $	NSA	Exog
RESUCPMA	Residual in the UCPMAX identity	Dollars	NSA	Exog
RESUCPMI	Residual in the UCPMIN identity	Dollars	NSA	Exog
RESUIC	Annual residual necessary to round the weekly maximum insurable earnings for unemployment insurance to the nearest multiple of five dollars	Dollars	NSA	Exog
RESUQPMA	Residual in the UQPMAX identity	Dollars	NSA	Exog
RESUQPMI	Residual in the UQPMIN identity	Dollars	NSA	Exog
RESXG86	Residual in the XG86 identity	Millions of 1986 $	SAAR	Ident
REXD	Average effective duties rate for 1994	Ratio	SAAR	Exog
REXT	Average effective excise tax rate for 1994	Ratio	SAAR	Exog
RFCP90	90-day Canadian commercial paper rate	Percent per annum	NSA	SR
RGAS	Average effective gasoline tax rate for 1994	Ratio	SAAR	Exog
RGASF1	The tax rate per litre on non-commercial users of fuels	Ratio	NSA	Exog
RGASF2	The tax rate per litre on all users of fuels effective since the may 1985 budget	Ratio	NSA	Exog
RGCB10	Average yield on government of Canada bonds over 10 years	Percent per annum	NSA	Stoc
RGCB10B	Average yield on 10 years benchmark bonds	Percent per annum	NSA	Stoc
RGCB13	Average yield on government of Canada bonds, 1-3 years	Percent per annum	NSA	Stoc

Mnemonic	Description	Units	SA/Raw	Type
RGCB35	Average yield on government of Canada bonds, 3-5 years	Percent per annum	NSA	Stoc
RGCB510	Average yield on government of Canada bonds, 5-10 years	Percent per annum	NSA	Stoc
RGIDXC	Effective rate for debt charges (excluding CPP)	Ratio	Raw	Stoc
RGST	Average effective GST rate for 1994	Ratio	SAAR	Exog
RGTPOAS	PIT - share of old age pension in OAS payments	Ratio	NSA	Exog
RIEN	Rate of energy investment out of oil and gas revenue	Ratio	NSA	Exog
RITCME	Investment tax credit for investment in machinery and equipment	Ratio	NSA	Exog
RITCNR	Investment tax credit for investment in non-residential construction	Ratio	NSA	Exog
RLAPSE	Rate of lapse of the stock of losses carried forward	Ratio	NSA	Exog
RLFECPP	The portion of employment outside of Quebec	Ratio	NSA	Exog
RMC	Chartered bank typical 5 years mortgage rate	Percent per annum	NSA	Stoc
RMSIID	Implicit rate of return on Canadian assets held by non-residents	Ratio	NSA	Stoc
RMSIIP	Ratio of total interest and miscellaneous investment income paid to non-residents attributable to profits	Ratio	SAAR	Exog
RMSST	Goods and services tax statutory rate	Ratio	NSA	Exog
RMSSTHC	Goods and services maximum housing credit rate	Ratio	NSA	Exog
RMYWI	Average yield on 10 industrial bonds calculated by Mcleod, Young , and Weir	Percent per annum	NSA	Stoc
RNRES	Average effective tax rate on non-residents for 1994	Ratio	SAAR	Exog
ROAINDX1	Quarterly indexation factors for OAS caps during the 6 and 5 program, to be applied to the fourth quarter in the previous year	Ratio	NSA	Exog
ROAINDX2	Quarterly indexation factors for OAS caps during the 6 and 5 program, comparable to roaindx1, but to be applied to the previous quarter	Ratio	NSA	Exog
RPIT	Average effective personal income tax rate for 1994	Ratio	SAAR	Exog
RPOILBLN	Ratio of blended oil price to wellhead oil price	Ratio	NSA	Exog
RPOILL	Multiplicative adjustment factor for average light oil price at the wellhead	Ratio	NSA	Exog
RPOPCPQP	The ratio of the number of Quebec pension plan benefit recipients to Canada pension plan benefit recipients	Ratio	NSA	Exog
RPXNG	Factor to convert natural gas export prices to implicit price deflator	Ratio	SA	Exog
RPXOIL	Factor to convert oil export prices from $/bbl to implicit price index	Ratio	SA	Exog
RQXNG	Factor to convert natural gas exports to 1986$	Ratio	SA	Exog
RSP	Specific federal sales tax rate on fuels in effect from 1977 q3 to 1982 q2 and from 1985 q3 onwards	Ratio	NSA	Ident
RSPHIST	The specific FST rate on motive fuels for the historical period (i.e. for forecast period it is held constant at its last actual value)	Ratio	NSA	Exog
RSTWAR	Weighted average provincial retail sales tax rate	Ratio	NSA	Exog
RSURTAX	Rate of the corporate surtax	Percent per annum	NAS	Exog
RTB	Three month treasury bill rate at Thursday tender	Percent per annum	NSA	Stoc
RTB180	Six month treasury bill rate at Thursday tender	Percent per annum	NSA	Ident
RTB365	Average 1-year treasury bill rate at Thursday tender	Percent per annum	NSA	Ident
RTCAF	Weighted average federal corporate income tax rate	Ratio	NSA	Exog
RTCAP	Weighted average provincial corporate income tax rate	Ratio	NSA	Exog
RTCGIC	Trust company 5-years guaranteed investment certificate rate	Percent per annum	NSA	Stoc
RTGASAV	Weighted average provincial motor fuel tax rate	$ per litre	NSA	Exog
RTISFA	Special federal sales tax rate on alcohol and tobacco effective Nov. 16, 1978	Ratio	NSA	Exog
RTISFB	Federal sales tax rate on building materials	Ratio	NSA	Exog
RTISFS	General federal sales tax rate	Ratio	NSA	Exog
RTISFSQ	General federal sales tax rate (RTISFS) for the quarter where the specific tax rate on motor fuels (RSPHIST) was last calculated, i.e. last quarter where QRATE = 1	Ratio	NSA	Exog
RTISFT	The federal sales tax rate on telecommunications services	Ratio	NSA	Exog
RTPYPRT	Effective provincial payroll tax rate	Ratio	SAAR	Exog
RTPYQYP	Ratio of Quebec assessed income of taxable returns to Canada taxable personal income	Ratio	NSA	Exog
RTRNRP	Real per capita transfers to non-residents from persons	Ratio	NSA	Exog
RTROYP	Average effective rate for total royalties	Ratio	NSA	Exog
RTRPNR	Real per capita transfers to persons from non-residents	Ratio	NSA	Exog
RTWFG	Ratio of actual current transfers to non-residents to its synthetic measure	Ratio	NSA	Exog
RTYPXQ	Weighted average provincial (excluding Quebec) personal income tax rate	Ratio	NSA	Exog
RUIC	Employee contribution rate for unemployment insurance	Ratio	NSA	SR

Mnemonic	Description	Units	SA/Raw	Type
RXSIID	Implicit rate of return on foreign assets held by Canadians	Ratio	NSA	Stoc
RXSIIDP	Ratio of total interest, dividends and miscellaneous investment income received from non-residents attributable to profits	Ratio	SAAR	Exog
RYGBCCA	Ratio of government business capital consumption allowances (YGBCCA) to corporations capital consumption allowances (YCCCA)	Ratio	SAAR	Exog
RYGXPFTP	Effective interest rate for interest income (net of remitted profits)	Ratio	Raw	Stoc
RYNRDIVB	Ratio of dividends paid to non-residents (YNRDIVB) to imports of services in the form of dividend payments (MSD)	Ratio	SAAR	Exog
RYOG	Ratio to convert model estimates of wellhead oil and gas revenues to EMR estimates	Ratio	NSA	Exog
RYPCBI	Ratio of personal income from bond interest to a three quarter moving average of total government interest on the public debt (GTPINF + GTPINP)	Ratio	SAAR	Exog
RYPDIVB	Ratio of dividends paid to Canadian residents (YPDIVB) to a three year moving average of corporation profits after taxes (YBPROFAT)	Ratio	SAAR	Exog
RYPID	The effective interest rate on personal term deposits	Percent per annum	NSA	Ident
RYPIINR	Ratio of receipts from non-residents (YPIINR) to interest and dividend receipts from non-residents (XSIID)	Ratio	SAAR	Exog
S86	Real sales	Millions of 1986 $	SAAR	Ident
SAMAXM	Maximum monthly spousal allowance	Dollars	NSA	Ident
SAPOPQ	Number of recipients of spousal allowances	Millions	NSA	Exog
SCADJILA	Adjustment to interest on loans and advances to place the forecast on the same basis as Statistics Canada's actuals	Millions of $	NSA	Exog
SCADJRP	Adjustment to remitted profits to place the forecast on the same basis as Statistics Canada's actuals	Millions of $	NSA	Exog
SFGTPINF	Seasonal factor to adjust raw quarterly interest on the public debt to an annual seasonally adjusted basis	Ratio	NSA	Exog
SFYGIF	Seasonal factor to adjust raw quarterly investment income to a seasonally-adjusted annual basis	Ratio	NSA	Exog
SOCMAXM	Maximum monthly combined old age security and guaranteed income supplement	Dollars	NSA	Ident
SPFXI	Switch to invoke the endogenous exchange rate equation	Binary	NSA	Exog
SPFXX	Switch in the PFX equation to invoke an exogenous exchange rate assumption	Binary	NSA	Exog
SUB86	Real subsidies	Millions of 1986 $	SAAR	Ident
SUBOTH	Subsidies, other federal and provincial	Millions of $	SAAR	Ident
SUBRC	Subsidy rate for total consumption expenditures	Ratio	NSA	Ident
SUBRCO	Subsidy rate for consumption expenditures excluding rent	Ratio	NSA	Ident
SUBRENER	Subsidy rate on energy consumption	Ratio	SA	Ident
SUBRFOOD	Subsidy rate on food consumption	Ratio	SA	Ident
SUBRGCF	Subsidy rate for government gross fixed capital formation	Ratio	SA	Ident
SUBRGNW	Subsidy rate for current non-wage government expenditures	Ratio	SA	Ident
SUBRIME	Subsidy rate for business investment in machinery and equipment	Ratio	SA	Ident
SUBRINRC	Subsidy rate for business investment in non-residential structures	Ratio	SA	Ident
SUBRIRC	Subsidy rate for investment in residential construction	Ratio	SA	Ident
SUBRRENT	Subsidy rate for consumption of paid and imputed rent	Ratio	SA	Ident
SUBRX	Subsidy rate for exports	Ratio	SA	Ident
SWITCH	Dummy variable used for policy simulation	Binary	NSA	Exog
SWITCH1	Dummy variable used for policy simulation	Binary	NSA	Exog
SWITCH2	Dummy variable used for policy simulation	Binary	NSA	Exog
SWITCH3	Dummy variable used for policy simulation	Binary	NSA	Exog
SWRESPG	Switch variable for the PXG equation (equals 1 in forecast and shocks, 0 in historical simulations)	Binary	NSA	Exog
SWTMON	Switch used in the money demand equation	Binary	NSA	Exog
SWUSPCMS	Switch used for commodity price shocks	Binary	NSA	Exog
TADUTYF	Specific excise duty rate on alcohol products	Ratio	NSA	Exog
TAOEXF	Specific excise tax rate on alcohol products	Ratio	NSA	Exog
TAX	Total personal taxes per capita	Thousands of $	SAAR	Ident
TAX1994	Total federal tax revenues for 1994	Millions of $	SAAR	Exog
TAXF65EM	Taxable number of filers aged 65 and over, employed	Thousands	NSA	Exog
TAXRC	Effective indirect tax rate levied on consumption expenditures	Ratio	NSA	Ident
TAXRCO	Effective indirect tax rate levied on consumption expenditures excluding rent	Ratio	NSA	Ident

Mnemonic	Description	Units	SA/Raw	Type
TAXRCRNT	Effective indirect tax rate levied on paid and imputed rent	Ratio	SAAR	Ident
TAXREN	Effective indirect tax rate levied on energy items	Ratio	SAAR	Ident
TAXRFOOD	Effective indirect tax rate levied on food (purchased from stores and restaurants)	Ratio	SAAR	Ident
TAXRGCF	Effective indirect tax rate levied on government gross capital formation	Ratio	SAAR	Ident
TAXRGCFF	Effective indirect tax rate levied on federal gross capital formation	Ratio	NSA	Ident
TAXRGCFP	Effective indirect tax rate levied on PLH gross capital formation	Ratio	NSA	Ident
TAXRGCGS	Effective indirect tax rate levied on total government expenditures on goods and services	Ratio	SAAR	Ident
TAXRGGSF	Effective indirect tax rate levied on federal expenditures on current goods and services	Ratio	NSA	Ident
TAXRGGSP	Effective indirect tax rate levied on municipalities, schools and hospitals current goods and services	Ratio	NSA	Ident
TAXRGNW	Effective indirect tax rate on current non-wage government expenditures	Ratio	SA	Ident
TAXRME	Effective indirect tax rate levied on investment on machinery and equipment	Ratio	SAAR	Ident
TAXRNRC	Effective indirect tax rate levied on non-residential business investment	Ratio	SAAR	Ident
TAXRRC	Effective indirect tax rate levied on residential construction	Ratio	SAAR	Ident
TAXRX	Effective indirect tax rate on exports	Ratio	SA	Ident
TCACCDEP	Book depreciation minus capital cost allowance	Millions of $		
TCAF	Direct taxes from corporate and government business enterprises	Millions of $	SAAR	Ident
TCAGF	Federal government capital consumption allowances	Millions of $	SAAR	Stoc
TCAGP	PLH capital consumption allowances	Millions of $	SAAR	Stoc
TCAP	PLH direct taxes on corporate and government business enterprises	Millions of $	SAAR	Stoc
TCAPXF	Federal corporate income tax liabilities excluding PGRT and IORT	Millions of $	SAAR	Stoc
TCBDBC	Book depreciation before claim	Millions of $	NSA	Stoc
TCBUDMSR	Effect of budget measures on corporate tax liabilities	Millions of $	NSA	Exog
TCCAPFIN	Capital tax on financial institutions	Millions of $	NSA	Exog
TCCCDEOB	Cumulative Canadian development expenses opening balance	Millions of $	NSA	Stoc
TCCCEEOB	Cumulative Canadian exploration expenses opening balance	Millions of $	NSA	Stoc
TCCDEC	Canadian development expenses claimed	Millions of $	NSA	Stoc
TCCEEC	Canadian exploration expenses claimed	Millions of $	NSA	Stoc
TCCPQP	Employer / employee contributions to the Canada and Quebec pension plans	Millions of $	SAAR	Ident
TCDIVREF	Corporate dividend refund	Millions of $	NSA	Exog
TCDNET	Depreciable assets net of accumulated depreciation	Millions of $	NSA	Ident
TCGBE	Revenue from corporate income taxes on government business enterprises	Millions of $	SAAR	Exog
TCIORF	Federal government revenue from the incremental oil revenue tax, on a national accounts accruals basis	Millions of $	NSA	Exog
TCITC	Investment tax credits claimed	Millions of $	NSA	Ident
TCITCCVR	Investment tax credits carry over	Millions of $	NSA	Ident
TCITCENS	Non-SR&ED ITC qualifying expenditures	Millions of $	NSA	Ident
TCITCESR	SR&ED ITC qualifying expenditures	Millions of $	NSA	Exog
TCITCOB	Investment tax credit opening balance	Millions of $	NSA	Stoc
TCITCRNS	Rate at which non-SR&ED ITC qualifying expenditures earn ITCS	Rate	NSA	Exog
TCITCRSR	Rate at which SR&ED ITC qualifying expenditures earn ITCS	Rate	NSA	Exog
TCITCUSE	Use of ITCS earned in prior-years	Rate	NSA	Exog
TCL2	Ratio of use of losses aged 2 to rate of use of losses aged 1	Ratio	NSA	Exog
TCL3	Ratio of use of losses aged 3 to rate of use of losses aged 1	Ratio	NSA	Exog
TCL4	Ratio of use of losses aged 4 to rate of use of losses aged 1	Ratio	NSA	Exog
TCL5	Ratio of use of losses aged 5 to rate of use of losses aged 1	Ratio	NSA	Exog
TCL6	Ratio of use of losses aged 6 to rate of use of losses aged 1	Ratio	NSA	Exog
TCL7	Ratio of use of losses aged 7 to rate of use of losses aged 1	Ratio	NSA	Exog
TCLARCOR	Large corporation tax	Millions of $	NSA	Exog
TCLCFC0	Losses carried forward of age 0	Millions of $	NSA	Ident
TCLCFC1	Losses carried forward of age 1	Millions of $	NSA	Ident
TCLCFC2	Losses carried forward of age 2	Millions of $	NSA	Ident
TCLCFC3	Losses carried forward of age 3	Millions of $	NSA	Ident
TCLCFC4	Losses carried forward of age 4	Millions of $	NSA	Ident
TCLCFC4	Losses carried forward of age 4	Millions of $	NSA	Ident
TCLCFC5	Losses carried forward of age 5	Millions of $	NSA	Ident
TCLCFC6	Losses carried forward of age 6	Millions of $	NSA	Ident
TCLCFEXP	Expires of losses carried forward	Millions of $	NSA	Ident

Mnemonic	Description	Units	SA/Raw	Type
TCLCFOB	Opening balance of losses carried forward	Millions of $	NSA	Ident
TCOCPP	Employer / employee contributions to the Canada pension plan	Millions of $	SAAR	Stoc
TCOQPP	Employer / employee contributions to the Quebec pension plan	Millions of $	SAAR	Stoc
TCOTHTAX	Other corporate tax liabilities	Millions of $		
TCPGRF	Federal government revenue, on a public collections basis, from the petroleum and gas revenue tax	Millions of $	NSA	Exog
TCTCDE	Current-year Canadian development expenses	Millions of $	NSA	Exog
TCTCEE	Current-year Canadian exploration expenses	Millions of $	NSA	Exog
TCUCCA	Undepreciated capital cost adjustments	Millions of $	NSA	Stoc
TCUCCBC	Undepreciated capital cost before claim	Millions of $	NSA	Stoc
TCUCCCOA	Undepreciated capital cost of additions	Millions of $	NSA	Stoc
TCUCCD	Undepreciated capital cost deductions	Millions of $	NSA	Stoc
TCUCCOB	Undepreciated capital cost opening balance	Millions of $	NSA	Stoc
TCULCF1	Use of losses of age 1	Rate	NSA	Ident
TCURF	Federal government total current revenue	Millions of $	SAAR	Ident
TCURP	PLH current revenues	Millions of $	SAAR	Ident
TCUSEBD	Rate at which net depreciable assets net of accumulated depreciation is depreciated	Rate	NSA	Exog
TCUSECCA	Rate at which undepreciated capital cost is utilized as capital cost allowance	Rate	NSA	Exog
TCUSECDE	Rate at which cumulative Canadian development expenses are utilized	Rate	NSA	Exog
TCUSECEE	Rate at which cumulative Canadian exploration expenses are utilized	Rate	NSA	Exog
TCUSELCB	Rate at which current-year losses are carried back	Rate	NSA	Stoc
TCUSEPYL	Rate at which prior-year losses are applies	Rate	NSA	Stoc
TFPC	Total factor productivity		NSA	Exog
TFPCT	Trend total factor productivity		NSA	Exog
TIAIRF	Federal revenue from the airport tax	Millions of $	SAAR	Exog
TICDNF	Federal revenue from the Canadian ownership charge on a national accounts accruals basis	Millions of $	NSA	Exog
TICUSF	Federal customs import duties	Millions of $	SAAR	Ident
TIEXDF	Federal excise duties	Millions of $	SAAR	Stoc
TIFUP	PLH indirect taxes, motive fuel tax collections	Millions of $	SAAR	Stoc
TIGASF	Federal gasoline tax revenue	Millions of $	NSA	Stoc
TIMISF	Federal revenue from miscellaneous indirect taxes	Millions of $	SAAR	Exog
TIMSTF	Net goods and services tax revenue	Millions of $	SAAR	Ident
TIMVLP	PLH indirect taxes, motor vehicle licence fees and permits	Millions of $	SAAR	Exog
TIND86	Real indirect taxes	Millions of 1986 $	SAAR	Ident
TIND88	Cumulative indexation factor for 1988 for taxable income brackets and non-refundable tax credits	Index	NSA	Exog
TINDF	Federal revenue from indirect taxes	Millions of $	SAAR	Ident
TINDP	PLH indirect taxes – total	Millions of $	SAAR	Ident
TINDRATE	Cumulative indexation factor for taxable income brackets and non-refundable tax credits	Index	NSA	Ident
TINGLF	Federal revenue from the natural gas and gas liquids tax on a national accounts accruals basis	Millions of $	NSA	Exog
TIOEXF	Other federal excise tax revenue	Millions of $	SAAR	Stoc
TIOILF	Oil export charge revenue	Millions of $	NSA	Exog
TIOP	PLH indirect taxes, other	Millions of $	SAAR	SR
TIPCCF	Federal revenue from the petroleum compensation charge on a national accounts accruals basis	Millions of $	NSA	Exog
TIPLPP	PLH indirect taxes, tax on profits of liquor commissions	Millions of $	SAAR	Exog
TIPTP	PLH indirect taxes, real and personal property taxes	Millions of $	SAAR	SR
TIRSTP	PLH indirect taxes - retail sales tax tobacco and alcohol sales taxes	Millions of $	SAAR	Stoc
TISF	Federal sales tax revenue	Millions of $	SAAR	Stoc
TIWGSF	Federal revenue from the western grain stabilization levy	Millions of $	SAAR	Exog
TNFILE	Total number of taxable filers.	Millions of persons	NSA	Stoc
TNFR1	Ratio of number of taxable filers ($0-$10,000 assessed income) to total number of taxable filers	Ratio	NSA	Exog
TNFR2	Ratio of number of taxable filers ($10,000-$20,000 assessed income) to total number of taxable filers	Ratio	NSA	Exog

Mnemonic	Description	Units	SA/Raw	Type
TNFR3	Ratio of number of taxable filers ($20,000-$30,000 assessed income) to total number of taxable filers	Ratio	NSA	Exog
TNFR4	Ratio of number of taxable filers ($30,000-$40,000 assessed income) to total number of taxable filers	Ratio	NSA	Exog
TNFR5	Ratio of number of taxable filers ($40,000-$50,000 assessed income) to total number of taxable filers	Ratio	NSA	Exog
TNFR6	Ratio of number of taxable filers ($50,000+ assessed income) to total number of taxable filers	Ratio	NSA	Exog
TPABATF	Federal general abatement	Millions of $	NSA	Exog
TPABATQ	Quebec abatement	Millions of $	NSA	Stoc
TPCLBACK	Repayment of social benefits by higher income individuals	Millions of $	NSA	Exog
TPCMRENT	Taxable proportion of non-rent consumption	Ratio		Exog
TPCNDEN	Portion of energy consumption subject to the provincial retail sales tax	Ratio	NSA	Exog
TPCNDFD	Portion of food consumption subject to the provincial retail sales tax	Ratio	NSA	Exog
TPCSRENT	Portion of rent subject to the provincial retail sales tax	Ratio	NSA	Exog
TPDF	Federal revenue from direct taxes on persons	Millions of $	SAAR	Ident
TPDFAEI	Forward-averaging elective income deduction	Millions of $	NSA	Exog
TPDGAB92	1992 budget measure adjustment for the registered pension plan contribution deduction equation	Millions of $	SAAR	Exog
TPDGAIN	Capital gains exemption	Millions of $	NSA	Stoc
TPDMIS	Deductions, miscellaneous including union and professional dues, tuition fees, child care expenses, disability deduction, charitable donations and eligible deductions transferred from spouse.	Millions of $	NSA	Stoc
TPDOTH	Other deductions	Millions of $	NSA	SR
TPDP	Total PLH direct taxes on persons	Millions of $	SAAR	Ident
TPDPRE88	Pre-1988 personal tax deductions that were phased out under tax reform	Millions $	NSA	Exog
TPDRPB92	1992 budget measure adjustment for the TPDRPP equation	Millions of $	SAAR	Exog
TPDRPP	Deduction: registered pension plan contributions.	Millions of $	NSA	Stoc
TPDRRSP	Deduction: registered retirement savings plan contributions.	Millions of $	NSA	Stoc
TPDRRSPS	Deduction: single filer, registered retirement savings plan contributions	Dollars	NSA	Exog
TPDTOT	Total deductions, taxable filers	Millions of $	NSA	Ident
TPEF	Federal estate tax revenue	Millions of $	SAAR	Exog
TPEP	PLH estate taxes	Millions of $	SAAR	Exog
TPFUEL	Portion of CFUEL subject to provincial fuel taxes	Ratio	NSA	Exog
TPGCF	Portion of government gross fixed capital formation subject to the provincial retail sales tax	Ratio	NSA	Exog
TPGCGS	Portion of government expenditure on goods and services subject to the provincial retail sales tax	Ratio	NSA	Exog
TPIME	Portion of M&E investment subject to the provincial retail sales tax	Ratio	NSA	Exog
TPINRC	Portion of non-residential construction investment subject to the provincial retail sales tax	Ratio	NSA	Exog
TPIRC	Portion of residential construction investment subject to the provincial sales tax	Ratio	NSA	Exog
TPMINTAX	Minimum tax	Millions $	NSA	Exog
TPPF	Employer / employee contributions to federal pension funds	Millions of $	SAAR	Exog
TPRBF1	Ratio of average taxable income per taxable filer ($0-$10,000 assessed income) to average taxable income	Ratio	NSA	Exog
TPRBF2	Ratio of average taxable income per taxable filer ($10,000-$20,000 assessed income) to average taxable income	Ratio	NSA	Exog
TPRBF3	Ratio of average taxable income per taxable filer ($20,000-$30,000 assessed income) to average basic federal tax	Ratio	NSA	Exog
TPRBF4	Ratio of average taxable income per taxable filer ($30,000-$40,000 assessed income) to average basic federal tax	Ratio	NSA	Exog
TPRBF5	Ratio of average taxable income per taxable filer ($0-$10,000 assessed income) to average taxable income	Ratio	NSA	Exog
TPRBF6	Ratio of average taxable income per taxable filer ($50,000 + assessed income) to average taxable income	Ratio	NSA	Exog
TPRODC	Incremental total factor productivity index in the commercial sector	Ratio	NSA	Exog
TPROP65	Taxable proportion of those aged 65 and over	Ratio	Raw	Exog

Mnemonic	Description	Units	SA/Raw	Type
TPROPLFE	Taxable proportion of labour force employed	Ratio	Raw	Exog
TPSRTXF	Federal surtax	Millions of $	NSA	Ident
TPSRTXFH	Estimated impact of high income surtax	Millions $	NSA	Exog
TPWCBP	Employer/employee contributions to PLH public service pensions, workers compensation and industrial vacation claims	Millions of $	SAAR	SR
TPX	Portion of exports subject to the provincial retail sales tax	Ratio	NSA	Exog
TPXTOT	Total personal exemptions, taxable filers	Millions of $	NSA	Exog
TPY1BF	Basic federal tax ($0-$10,000 assessed income)	Millions of $	NSA	Ident
TPY2BF	Basic federal tax ($10,000-$20,000 assessed income)	Millions of $	NSA	Ident
TPY3BF	Basic federal tax ($20,000-$30,000 assessed income)	Millions of $	NSA	Ident
TPY4BF	Basic federal tax ($30,000-$40,000 assessed income)	Millions of $	NSA	Ident
TPY5BF	Basic federal tax ($40,000-$50,000 assessed income)	Millions of $	NSA	Ident
TPY6BF	Basic federal tax ($50,000+ assessed income)	Millions of $	NSA	Ident
TPYADJP	Adjustment from gross to net provincial pit	Millions of $	NSA	Exog
TPYAFP	Transfers to provinces from federal accounts for additional financing	Millions of $	NSA	Exog
TPYANN	Annuity contract income	Millions of $	NSA	Exog
TPYAS	Total income assessed of all taxable filers	Millions of $	NSA	Ident
TPYBF	Basic federal tax	Millions of $	NSA	Ident
TPYBFT	Basic federal tax before tax credits	Millions of $	NSA	Ident
TPYBUS	Assessed income, net non-farm business income including net business income, net professional income and net commission income.	Millions of $	NSA	Stoc
TPYCQP	Assessed income, CPP/QPP benefits.	Millions of $	NSA	Stoc
TPYDIV	Income, taxable amount of dividends	Millions of $	NSA	Exog
TPYEMP	Assessed income, total employment earnings, includes wages and salaries, commissions from employment and other employment earnings.	Millions of $	NSA	Stoc
TPYF	Federal personal income tax revenue on a national accounts basis	Millions of $	SAAR	Stoc
TPYFA	Assessed income, family allowance benefits.	Millions of $	NSA	Exog
TPYFARM	Assessed income, net farming and fishing income.	Millions of $	NSA	Stoc
TPYFAT	Forward-averaging tax	Millions of $	NSA	Exog
TPYFAWI	Forward-averaging withdrawal income	Millions of $	NSA	Exog
TPYFISH	Net fishing income	Million $	NSA	Exog
TPYGAIN	Net capital gains	Millions of $	NSA	Exog
TPYINV	Assessed income, investment income excluding taxable dividends, including bond interest bank interest, mortgage interest, trust income, other Canadian investment and foreign investment income.	Millions of $	NSA	Stoc
TPYMIS	Assessed income, miscellaneous income including net rental income	Millions of $	NSA	Exog
TPYNPF	Net federal tax payable	Millions of $	NSA	Ident
TPYOAP	Assessed income, old age pension benefits.	Millions of $	NSA	Stoc
TPYOPSA	Income, other pensions or superannuation	Millions of $	NSA	Exog
TPYP	Total PLH personal income tax collections	Millions of $	SAAR	Ident
TPYPAYF	Federal tax payable before Quebec abatement	Millions of $	NSA	Ident
TPYPQ	Quebec personal income tax collections	Millions of $	SAAR	Stoc
TPYPRT	Provincial payroll taxes	Millions of $	SAAR	Stoc
TPYPXQ	Provincial (excluding Quebec) personal income tax collections	Millions of $	SAAR	Stoc
TPYRENT	Net rental income for tax purposes	Millions $	NSA	Exog
TPYTAX	Taxable income assessed of all taxable filers	Millions of $	NSA	Ident
TPYUIB	Assessed income, unemployment insurance benefits.	Millions of $	NSA	Stoc
TR1BR	Basic federal tax, marginal tax rate 1st income bracket	Ratio	NSA	Exog
TR2BR	Basic federal tax, marginal tax rate 2nd income bracket	Ratio	NSA	Exog
TR3BR	Basic federal tax, marginal tax rate 3rd income bracket	Ratio	NSA	Exog
TRABATQ	Federal abatement rate for Quebec	Ratio	NSA	Exog
TRBP	Current transfers from persons to corporations	Millions of $	SAAR	Stoc
TRCHSTEN	Canada health and social transfer entitlement	Millions of $	NSA	
TRCHSTES	Escalator for federal expenditure on the Canada health and social transfer	Millions of $	NSA	
TRCHSTTP	Tax point transfers for the Canada health and social transfer	Millions of $	NSA	
TRDIVTC	Dividend tax credit, effective rate	Ratio	NSA	Exog
TRDRRSPS	Deduction rate. single filer, registered retirement savings plan	Ratio	NSA	Exog
TREPFENP	Established program financing entitlement	Millions of $	SAAR	Ident

Mnemonic	Description	Units	SA/Raw	Type
TREPFESP	Escalator for federal expenditure on established program financing	Millions of $	SAAR	Ident
TREPFTTP	Tax transfer points of established program financing	Millions of $	SAAR	Ident
TRFCAPP	Federal expenditures on Canada assistance plan to PLH governments	Millions of $	SAAR	SR
TRFCHSTP	Federal expenditures for the Canada health and social transfer to PLH governments	Millions of $	NSA	
TRFEPFP	Federal expenditures on established program financing to PLH governments	Millions of $	SAAR	Ident
TRFEQP	Federal expenditures on fiscal equalization to PLH governments	Millions of $	SAAR	SR
TRFOP	Federal expenditures on other transfers to PLH governments	Millions of $	SAAR	SR
TRFP	Federal transfers to PLH governments	Millions of $	SAAR	Ident
TRFPRF	Other federal current transfers from persons	Millions of $	SAAR	Exog
TRMORT	Mortgage interest payments by households	Millions of $	SAAR	Stoc
TRNRP	Current transfers from persons to non-residents	Millions of $	SAAR	Ident
TROYP	Total provincial government revenue from crown royalties	Millions of $	SAAR	Ident
TRPB	Current transfers to persons from corporations	Millions of $	SAAR	Stoc
TRPNR	Current transfers to persons from non-residents	Millions of $	SAAR	Ident
TRPRP	PLH total transfers from persons (hospital insurance premiums and other)	Millions of $	SAAR	SR
TRSRTXF	Federal surtax	Millions of $	NSA	Exog
TTCBAS	Personal tax credits, basic tax credit	Millions of $	NSA	Ident
TTCBASS	Personal tax credits, single filer, basic	Dollars	NSA	Ident
TTCCHAR	Personal tax credit, charitable donations	Millions $	NSA	Exog
TTCCHD	Child tax credit, all returns	Millions of $	NSA	Exog
TTCCQP	Personal tax credits, CPP/QPP contributions	Millions of $	NSA	Ident
TTCDEP	Personal tax credits, single filers, old age	Millions of $	NSA	Exog
TTCDIV	Dividend tax credit, taxable filers	Millions of $	NSA	Stoc
TTCFA	Forward-averaging tax credit	Millions of $	NSA	Exog
TTCFOR	Federal foreign tax credit	Millions $	NSA	Exog
TTCINDEX	Cumulative indexation factor for non-refundable tax credits	Index	Raw	Ident
TTCINV	Federal investment tax credit (personal income tax)	Millions $	NSA	Exog
TTCMAR	Personal tax credit, married or equivalent tax credit	Millions of $	NSA	Ident
TTCMARS	Personal tax credits, single filer, married status	Dollars	NSA	Ident
TTCMIS	Personal tax credits, misc. Tax credits	Millions of $	NSA	Exog
TTCOLD	Personal tax credit, old age tax credits	Millions of $	NSA	Ident
TTCOLDS	Personal tax credits, single filer, old age	Dollars	NSA	Ident
TTCSALE	Federal sales tax credit	Millions of $	NSA	Exog
TTCTOT	Total personal tax credits, taxable filers	Millions of $	NSA	Ident
TTCUIB	Personal tax credits, unemployment insurance contributions	Millions of $	NSA	Ident
TTDUTYF	Specific excise duty rate on tobacco products	Ratio	NSA	
TTOEXF	Specific excise tax rate on tobacco products	Ratio	NSA	Exog
TTOTF	Total federal revenue - national accounts	Millions of $	SAAR	Ident
TTOTP	Total PLH revenues	Millions of $	SAAR	Ident
TUIRF	Employer / employee contributions to the unemployment insurance fund	Millions of $	SAAR	Stoc
TWF	Federal revenues from the withholding tax on non-residents	Millions of $	SAAR	Stoc
TWFG	Current transfers to non-residents (withholding taxes)	Millions of $	SAAR	Ident
TY1BR	Basic federal tax, 1st taxable income bracket	Dollars	NSA	Ident
TY2BR	Basic federal tax, 2nd taxable income bracket	Dollars	NSA	Ident
TYBINDEX	Indexing factor (cumulative) for taxable income brackets	Index	NSA	Ident
TYCCG	Corporations taxable capital gains	Millions of $	NSA	Stoc
TYCCYL	Current year losses	Millions of $	NSA	Stoc
TYCCYLCB	Current year losses carried back	Millions of $	NSA	Ident
TYCDEPL	Depletion allowance	Millions of $	NSA	Exog
TYCEXPD	Canadian exploration and development expenses claimed	Millions of $	NSA	Ident
TYCINV	Inventory allowance	Millions of $	NSA	Exog
TYCNDEE	Exploration and development expenses for book purposes	Millions of $		
TYCPYL	Prior-year losses applied	Millions of $	NSA	Stoc
TYCRA	Resource allowance	Millions of $	NSA	Stoc
TYCROY	Provincial royalties	Millions of $	NSA	Stoc
TYCTAX	Corporate taxable income	Millions of $	NSA	Stoc
UCINV	User cost of inventories	Ratio	NSA	Ident
UCME	User cost of machinery and equipment investment	Ratio	NSA	Ident

Mnemonic	Description	Units	SA/Raw	Type
UCNRC	User cost of non-residential investment	Ratio	NSA	Ident
UCPMAX	Annual maximum contributory income for the CPP/QPP	Dollars	NSA	Ident
UCPMIN	Annual level of exempt income for the Canada and Quebec pension plans	Dollars	NSA	Ident
UICBASE	Base for setting maximum contributory earnings for unemployment insurance	Dollars	NSA	Exog
UICMAX	Maximum insurable earnings for unemployment insurance	Dollars	NSA	Ident
UICR	Portion of employed covered by unemployment insurance	Ratio	SAAR	Exog
UINDEX	Indexation factor for maximum insurable earnings for unemployment insurance	Ratio	NSA	Ident
UQPMAX	Maximum yearly pensionable earnings under the Quebec pension plan	Dollars	NSA	Ident
UQPMIN	Minimum yearly pensionable earnings under the Quebec pension plan	Dollars	NSA	Ident
USACT86	Economic activity for the U.S.	1986 = 1.0	SAAR	Exog
USLUR	U.S. unemployment rate	Percentage	SAAR	Exog
USPAC	Implicit deflator for economic activity for the U.S.	1986 = 1.0	SAAR	Exog
USPCM	U.S. wholesale price index, crude materials for further processing excl. food and energy	1982 = 1	NSA	Exog
USPCMS	Simulation rule for commodity price shock (=USPCM)	1982 = 1.0	NSA	Exog
USPCPI	U.S. consumer price index	1981 = 1.0	SAAR	Exog
USPCPIX	U.S. consumer price index excluding food and energy	1983 = 1.0	SAAR	Exog
USPFOOD	U.S. wholesale price index, crude materials for further processing, food	1982 = 1.0	SA	Exog
USPFX	G-15 currencies per us $	Avg. 80 - 82 = 1.0	NSA	Exog
USPFXROW	G-14 currencies per us $ (excluding Canada)	Avg. 80 - 82 = 1.0	NSA	Ident
USPGDP	Implicit price deflator for U.S. gross domestic product	1987 = 1.0	SAAR	Exog
USPIME	Us implicit price deflator of M&E	1982 = 1.0	SAAR	Exog
USPXW	Implicit price deflator for wheat exports converted in US$	Ratio	NSA	Exog
USRCBP	U.S. prime rate on short-term business loans	Percent per annum	NSA	Exog
USRFCP90	U.S. 90-day commercial paper rate adjusted to a Canadian basis	Percent per annum	NSA	Exog
USRGB10	Average market yield on U.S. 10 year bonds constant maturity	Percent per annum	NSA	Exog
USRGB3	Average yield on U.S. government bonds, 3 years	Percent per annum	NSA	Exog
USRGB5	Average yield on U.S. government bonds, 5 years	Percent per annum	NSA	Exog
USRMC3A	Average yield on Moody's AAA corporate U.S. bonds	Percent per annum	NSA	Exog
USYGDP	U.S. nominal gross domestic product	Billions of U.S.$	SAAR	Ident
USYGDP87	U.S. real gross domestic product	Billions of 1987 U.S.$	SAAR	Exog
USYIELD	Yield of Standard and Poor's daily stock price indices - composite	Percent	NSA	Exog
W	Economy-wide hourly wage rate (including supplementary labour income)	Dollars / hour	NSA	Ident
WRC	Commercial sector hourly wage rate (excluding supplementary labour income)	Dollars / hour	NSA	Stoc
WRNC	Non-commercial sector hourly wage rate (excluding supplementary labour income)	Dollars / hour	NSA	Ident
WUIC	Labour income series used for unemployment insurance - based upon average wages and salaries from taxation data	Dollars	NSA	Stoc
X	Total exports of goods and services	Millions of $	SAAR	Ident
X86	Total exports of goods and services	Millions of 1986 $	SAAR	Ident
XAE86	Adjusting entry - exports of goods and services	Millions of 1986 $	SAAR	Exog
XC86	Exports of commodities	Millions of 1986 $	SAAR	Stoc
XCACT	Export activity: commodity	1986 = 1.0	SAAR	Ident
XG	Total exports of merchandise goods	Millions of $	SAAR	Ident
XG86	Total exports of merchandise goods	Millions of 1986 $	SAAR	Stoc
XM86	Exports of end products	Millions of 1986 $	SAAR	Stoc
XMACT	Export activity: end products	1986 = 1.0	SAAR	Ident
XNG86	Volume of natural gas exports	Millions of 1986 $	SAAR	Ident
XOIL86	Volume of oil exports	Millions of 1986 $	SAAR	Exog
XRETAIN	Receipt of reinvested earnings from non-residents	Millions of $	SAAR	Exog
XS	Total exports of services	Millions of $	SAAR	Ident
XS86	Total exports of services	Millions of 1986 $	SAAR	Stoc
XSACT	Export activity: services	1986 = 1.0	SAAR	Ident
XSIID	Investment income received from non-residents	Millions of $	SAAR	Stoc
XSIIDP	Undistributed corporate profits: interest, dividends and miscellaneous investment income received from non-residents	Millions of $	SAAR	Ident
XW86	Export of wheat	Millions of 1986 $	SAAR	Ident
YBCCA	Capital consumption allowances – corporations	Millions of $	SAAR	Stoc
YBCP	Bank of Canada profits	Millions of $	NSA	Ident
YBCPFMB	Bank of Canada accruals of interest receipts on federal domestic marketable bonds	Millions of $	NSA	Ident

Mnemonic	Description	Units	SA/Raw	Type
YBCPFTB	Bank of Canada accrued amortised discount on treasury bills	Millions of $	NSA	Ident
YBPROFAT	Corporation profits after taxes	Millions of $	SAAR	Ident
YBPROFBT	Corporation profits before taxes , national income basis	Millions of $	SAAR	Ident
YBPROFDP	Corporation profits before taxes, domestic product basis	Millions of $	SAAR	Ident
YBRP	Undistributed corporation profits	Millions of $	SAAR	Ident
YCCAOG	Capital cost allowance for oil and gas sector	Millions of $	NSA	Exog
YCUR	Adjusted per capita disposable income	Millions of $	SAAR	Ident
YFD	Final demand	Millions of $	SAAR	Ident
YFD86	Final demand	Millions of 1986 $	SAAR	Ident
YFDD	Final domestic demand	Millions of $	SAAR	Ident
YFDD86	Constant dollar final domestic demand	Millions of 1986 $	SAAR	Ident
YFDDAE86	Adjusting entry - final domestic demand	Millions of 1986 $	SAAR	Exog
YGAP	Difference between actual and potential output - total economy	Percentage	SAAR	Ident
YGAPC	Difference between actual and potential output – commercial sector	Percentage	SAAR	Ident
YGBCCA	Capital consumption allowances - government business enterprises	Millions of $	SAAR	Ident
YGBORPF	Other components of remitted profits of government enterprises	Millions of $	NSA	Exog
YGBRP	Unremitted profits of government business enterprises	Millions of $	SAAR	Exog
YGBRPF	Remitted profits of government enterprises, net of deficits	Millions of $	NSA	Ident
YGDP	Gross domestic product at market prices	Millions of $	SAAR	Ident
YGDP86	Constant dollar gross domestic product	Millions of 1986 $	SAAR	Ident
YGDPAE86	Adjusting entry - gross domestic product	Millions of 1986 $	SAAR	Exog
YGDPC	Commercial sector nominal gross domestic product at factor cost	Millions of $	SAAR	Ident
YGDPC86	Constant dollar commercial sector gross domestic product at factor cost	Millions of 1986 $	SAAR	Stoc
YGDPCE86	Expected commercial sector real gross domestic product at factor cost	Millions of 1986 $	SAAR	Ident
YGDPCN86	Normal commercial sector real gross domestic product at factor cost	Millions of 1986 $	SAAR	Ident
YGDPCP86	Potential commercial sector real gross domestic product at factor cost	Millions of 1986 $	SAAR	Ident
YGDPFC	Gross domestic product at factor cost	Millions of $	SAAR	Ident
YGDPFC86	Constant dollar gross domestic product at factor cost	Millions of 1986 $	SAAR	Ident
YGDPP86	Potential real gross domestic product	Millions of 1986 $	SAAR	Ident
YGIBSF	Imputed banking services	Millions of $	NSA	Exog
YGICBBF	Interest on chartered bank balances	Millions of $	NSA	SR
YGIF	Federal government investment income	Millions of $	SAAR	Ident
YGIFQ	Federal investment income on a quarterly basis	Millions of $	NSA	Ident
YGILAF	Interest on loans and advances made by the federal government	Millions of $	NSA	Ident
YGIOLAF	Other interest on loans and advances made by the federal government	Millions of $	NSA	Exog
YGIP	PLH investment income	Millions of $	SAAR	Ident
YGIPIP	PLH interest income and remitted profits of crown corporations (excluding BCPC)	Millions of $	SAAR	Ident
YGNP	Gross national product at market prices	Millions of $	SAAR	Ident
YGNP86	Gross national product	Millions of 1986 $	SAAR	Ident
YGXPFTP	Interest incomes net of remitted profits	Millions of $	SAAR	Ident
YIICPP	Canada pension plan investment income	Millions of $	SAAR	Stoc
YIICPPF	Interest payments by the federal government to the Canada pension plan	Millions of $	NSA	Exog
YIIQPP	Quebec pension plan investment income	Millions of $	SAAR	Stoc
YIIQPPPR	Interest rate premium for Quebec pension plan investment income	Percent per annum	NSA	Exog
YIVA	Inventory valuation adjustment	Millions of $	SAAR	Ident
YLC	Commercial sector - wages, salaries and supplementary labour income	Millions of $	SAAR	Ident
YNDI	Net domestic income at factor cost	Millions of $	SAAR	Ident
YNF	Net income received by farm operators from farm production	Millions of $	SAAR	Exog
YNNI	Net national income at factor cost	Millions of $	SAAR	Ident
YNRDIVB	Dividends paid to non-residents	Millions of $	SAAR	Ident
YOG	Upstream oil and gas sulphur gross revenue	Millions of $	NSA	Ident
YP	Personal income	Millions of $	SAAR	Ident
YPCBI	Personal interest income from government and corporate bonds	Millions of $	SAAR	Ident
YPCCA	Capital consumption allowances - persons and unincorporated business	Millions of $	SAAR	Stoc
YPD	Personal disposable income	Millions of $	SAAR	Ident
YPDIVB	Dividends paid to Canadian residents	Millions of $	SAAR	Ident
YPERM	Per capita consumer income	Millions of $	SAAR	Ident

Mnemonic	Description	Units	SA/Raw	Type
YPFTP	PLH remitted profits	Millions of $	SAAR	Stoc
YPII	Personal interest, dividends, and miscellaneous investment income (excluding dividends paid to Canadian residents)	Millions of $	SAAR	Ident
YPIINR	Receipts from non-residents	Millions of $	SAAR	Ident
YPLIC	Investment income received from insurance companies	Millions of $	SAAR	Ident
YPMP	Military pay and allowances	Millions of $	SAAR	SR
YPOII	Other investment income	Millions of $	SAAR	Ident
YPS	Personal saving	Millions of $	SAAR	Ident
YPSR	Savings rate	Percentage	SAAR	Ident
YPWSSL	Wages, salaries and supplementary labour income	Millions of $	SAAR	Ident
YREE	Statistical discrepancy	Millions of $	SAAR	Exog
YREE86	Constant dollar statistical discrepancy	Millions of 1986 $	SAAR	Exog
YTII	Interest and miscellaneous investment income	Millions of $	SAAR	Ident
YUB	Net income of non-farm unincorporated business, including rent	Millions of $	SAAR	Stoc
YUBRENT	Net rental income of non-farm unincorporated business	Millions of $	SAAR	Stoc
YUIPPC	Employer contributions to the unemployment insurance fund and CPP/QPP	Millions of $	NSA	Ident
YWB	Adjustment on grain transactions (wheat board profit)	Millions of $	SAAR	Exog

Table 1.1
Unit Root Tests: Variable Levels
(Log-level unless otherwise indicated)

Variable	Aug. Dickey-Fuller*,***		Phillips-Perron*,***		IMA(1,1)	Standard Drift**	Sample
	C & T	C	C & T	C			
C	0.4264	0.6161	0.9189	0.7777	0.1529	0.1288	80Q1-94Q4
I_H	0.9046	0.6563	0.6909	0.4288	0.5699	0.0112	76Q3-94Q4
I_M	0.0519	0.5218	0.4683	0.5282	0.2290	0.3686	78Q1-94Q4
I_S	0.3312	0.0967	0.3285	0.0862	0.2308	0.0544	78Q1-94Q4
K_{INVB}	0.7043	0.2209	0.8525	0.1061	0.5314	0.1852	70Q2-94Q4
X_C	0.2187	0.9939	0.1654	0.9947	0.0109	0.2251	74Q2-94Q4
X_M	0.7923	0.9811	0.7766	0.9642	-0.065	0.4846	82Q1-94Q4
X_S	0.0098	0.9848	0.0772	0.9627	-0.222	0.2601	82Q1-94Q4
M_C	0.0072	0.9836	0.3081	0.9670	0.2325	0.3333	82Q1-94Q4
M_M	0.0639	0.9598	0.6849	0.8965	0.1859	0.3795	82Q1-94Q4
M_S	0.7118	0.5205	0.7521	0.6798	-0.036	0.2298	71Q3-94Q4
Y	0.4566	0.2687	0.4802	0.3258	0.2567	0.4539	70Q1-94Q4
Y_c	0.3530	0.5456	0.9536	0.6170	0.6174	0.0871	76Q3-94Q4
YX_C	0.5858	0.8311	0.5490	0.9030	0.3998	0.8608	74Q2-94Q4
YX_M	0.4908	0.6519	0.8128	0.5632	0.4958	0.6151	82Q1-94Q4
YX_S	0.3064	0.5465	0.8819	0.4630	0.5469	0.7470	82Q1-94Q4
YM_C	0.2246	0.9646	0.8539	0.9308	0.5986	0.4167	82Q1-94Q4
YM_M	0.5520	0.9802	0.7907	0.9698	0.4448	0.4416	82Q1-94Q4
YM_S	0.2206	0.7634	0.4457	0.5045	0.1724	0.6069	71Q3-94Q4
PT_{FC}	0.3956	0.0207	0.3007	0.0000	0.2587	0.3547	80Q1-94Q4
WT	0.6928	0.1396	0.2285	0.0000	0.2742	0.3361	80Q1-94Q4
PI	0.4138	0.1152	0.3836	0.0082	0.2863	0.1438	80Q1-94Q4
P_R	0.0694	0.0155	0.3139	0.1076	0.3119	0.0688	80Q1-94Q4
TFP	0.0040	0.0011	0.0029	0.0008	-0.312	0.0688	80Q1-94Q4
RR_{LT}***	0.5333	0.3301	0.2679	0.2299	0.2218	0.1569	80Q1-94Q4
P_H/P_C***	0.3291	0.1046	0.4906	0.1759	0.2663	0.0818	76Q3-94Q4
UC_M/P	0.1740	0.8681	0.1320	0.6695	0.1010	0.0897	78Q1-94Q4
UC_S/P	0.1682	0.0450	0.1399	0.0440	0.2130	0.1384	78Q1-94Q4
UC_{INV}***	0.0211	0.1067	0.1315	0.1532	-0.089	0.0046	70Q2-94Q4
PT_{FC}/PF_C	0.2240	0.2004	0.6898	0.1343	0.6266	0.0621	74Q2-94Q4
P_{XC}/PF_{XC}	0.5800	0.8674	0.4860	0.9222	0.3926	0.1615	74Q2-94Q4
P_{XM}/PF_{XM}	0.9592	0.9825	0.9867	0.9930	0.0906	0.4218	82Q1-94Q4
P_{XS}/PF_{XS}	0.1577	0.2658	0.9362	0.5931	0.3940	0.0240	82Q1-94Q4
P_{MC}/PT_{FC}	0.9909	0.0641	0.8911	0.0412	-0.024	0.2462	82Q1-94Q4
P_{MM}/PT_{FC}	0.9397	0.5445	0.9550	0.4861	0.2357	0.2915	82Q1-94Q4
P_{MS}/PT_{FC}	0.1561	0.5724	0.5571	0.8427	0.2350	0.0429	71Q3-94Q4
IT***	0.3729	0.9165	0.6951	0.9916	0.9438	0.1868	70Q2-94Q4

* This reports the p-value for tests performed with constant and trend (C & T) and constant only (C).
** Absolute values.
*** The level instead of the log-level.

Table 1.2
Unit Root Tests: Variable First Differences
(First-difference of log-level unless otherwise indicated)

Variable	Aug. Dickey-Fuller*,**		Phillips-Perron*,**		IMA(1,1)	Standard. Drift**	Sample
	C & T	C	C & T	C			
C	0.6270	0.3170	0.0000	0.0000	-0.757	0.0161	80Q1-94Q4
I_H	0.0000	0.0000	0.0000	0.0000	-0.977	0.0459	76Q3-94Q4
I_M	0.0000	0.0000	0.0000	0.0000	-0.744	0.0331	78Q1-94Q4
I_S	0.0047	0.0000	0.0000	0.0000	-0.974	0.0066	78Q1-94Q4
K_{INVB}	0.0012	0.0004	0.0012	0.0005	-0.334	0.0067	70Q2-94Q4
X_C	0.0337	0.0237	0.0000	0.0000	-0.982	0.0618	74Q2-94Q4
X_M	0.4177	0.1388	0.0000	0.0000	-0.961	0.0548	82Q1-94Q4
X_S	0.0461	0.2688	0.0000	0.0000	-0.975	0.0712	82Q1-94Q4
M_C	0.0000	0.0000	0.0000	0.0000	-1.071	0.0236	82Q1-94Q4
M_M	0.0530	0.0123	0.0000	0.0000	-0.670	0.1060	82Q1-94Q4
M_S	0.4328	0.1824	0.0000	0.0000	-0.989	0.0212	71Q3-94Q4
Y	0.0126	0.0000	0.0000	0.0000	-0.762	0.0073	70Q1-94Q4
Y_C	0.2186	0.0670	0.1416	0.0367	-0.270	0.0201	76Q3-94Q4
YX_C	0.1210	0.0314	0.0000	0.0000	-0.675	0.0229	74Q2-94Q4
YX_M	0.2897	0.1158	0.0010	0.0002	-0.318	0.1149	82Q1-94Q4
YX_S	0.2613	0.1217	0.0010	0.0003	-0.315	0.1127	82Q1-94Q4
YM_C	0.0233	0.0043	0.0053	0.0005	-0.520	0.0861	82Q1-94Q4
YM_M	0.0030	0.0006	0.0010	0.0001	-0.599	0.0750	82Q1-94Q4
YM_S	0.0000	0.0000	0.0000	0.0000	-0.849	0.0124	71Q3-94Q4
PT_{FC}	0.0253	0.0668	0.0000	0.0000	-0.809	0.2031	80Q1-94Q4
WT	0.2376	0.3759	0.0000	0.0000	-0.989	0.0990	80Q1-94Q4
PI	0.0971	0.0377	0.0001	0.0001	-0.600	0.0663	80Q1-94Q4
P_R	0.0000	0.0000	0.0000	0.0000	-0.989	0.0640	80Q1-94Q4
TFP	0.0000	0.0000	0.0000	0.0000	-0.982	0.0801	80Q1-94Q4
RR_{LT}***	0.0000	0.0000	0.0000	0.0000	-0.985	0.0010	80Q1-94Q4
P_H/P_C***	0.0207	0.0025	0.0000	0.0000	-0.753	0.0523	76Q3-94Q4
UC_M/P	0.0003	0.0000	0.0000	0.0000	-0.976	0.0254	78Q1-94Q4
UC_S/P	0.0010	0.0002	0.0000	0.0000	-0.981	0.0068	78Q1-94Q4
UC_{INV}***	0.0001	0.0000	0.0000	0.0000	-0.982	0.0028	70Q2-94Q4
PT_{FC}/PF_C	0.1896	0.0664	0.0000	0.0000	-0.695	0.0405	74Q2-94Q4
P_{XC}/PF_{XC}	0.0017	0.0000	0.0000	0.0000	-0.972	0.0993	74Q2-94Q4
P_{XM}/PF_{XM}	0.1593	0.0590	0.0000	0.0000	-0.893	0.0834	82Q1-94Q4
P_{XS}/PF_{XS}	0.0001	0.0000	0.0001	0.0000	-0.969	0.0840	82Q1-94Q4
P_{MC}/PT_{FC}	0.0075	0.0000	0.0000	0.0000	-0.985	0.0926	82Q1-94Q4
P_{MM}/PT_{FC}	0.0001	0.0000	0.0000	0.0000	-0.765	0.0096	82Q1-94Q4
P_{MS}/PT_{FC}	0.1155	0.0401	0.0000	0.0000	-0.767	0.0132	71Q3-94Q4
IT***	0.5227	0.2205	0.9578	0.6585	0.2415	0.0063	70Q2-94Q4

* This reports the p-value for tests performed with constant and trend (C & T) and constant only (C).
** Absolute values.
*** The first difference of level instead of the log-level.

Table 2.1
Cointegration Tests

Function	Engle-Granger			Johansen			Sample
	ADF*	PP*	IMA*	Trace**	Max. E.V.**	# Vector	
C	0.733	0.13	0.03	0.10	0.20	1 or 2	80Q1-94Q4
I_H	0.000	0.00	0.31	0.05	0.05	1	76Q3-94Q4
I_M***	0.026	0.05	0.16	0.05	0.05	1	78Q1-94Q4
I_S***	0.003	0.04	0.24	0.05	0.05	1	78Q1-94Q4
K_{INVB}	0.431	0.24	0.18	0.10	0.10	1	71Q3-94Q4
X_C	0.294	0.00	-0.39	0.05	0.05	1	70Q2-94Q4
X_M	0.162	0.00	-0.44	0.10	0.10	1	74Q2-94Q4
X_S	0.540	0.00	-0.62	0.10	0.10	1	82Q1-94Q4
I_C	0.446	0.00	-0.67	0.20	0.20	1	82Q1-94Q4
I_M	0.013	0.08	-0.06	0.05	0.05	1	82Q1-94Q4
I_S	0.002	0.00	-0.35	0.05	0.05	1	82Q1-94Q4
PT_{FC}***	0.000	0.00	-0.51	0.01	0.01	1 or 2	80Q1-94Q4

* p-value
** Confidence level
*** ADF and PP test are performed on constrained forms, while the Johansen test is performed on unconstrained forms.

Table 2.2
Coefficients Of Cointegrating Equations

Function	Error correction		Output coefficient			Price coefficient		
	Term	p-value	Model	EG	Johansen	Model	E-G	Johansen
C	-0.209	0.0004	1.22	1.19	0.42	-0.007	0.004	0.055
I_H	-0.534	0.0000	1.67	1.60	1.73	-1.53	-2.79	-3.27
I_M	-0.080	0.0026	1	1	---	-1	-1	---
I_S	-0.050	---	1	1	---	-1	-1	---
K_{INVB}	-0.087	0.0000	1	1	1	-0.99	-0.17	1.73
X_C	-0.372	0.0000	1.10	1.06	1.22	-0.44	-0.36	-0.33
X_M	-0.604	0.0000	1.43	1.44	1.24	-1.53	-1.56	-1.64
X_S	-0.560	0.0000	1.47	1.39	1.62	-0.38	-0.33	-0.17
I_C	-0.460	0.0001	1.40	1.69	1.49	-0.30	0.09	-0.10
I_M	-0.182	0.0175	1.05	1.70	1.53	-0.72	0.23	0.08
I_S	-0.428	0.0000	0.99	0.94	0.95	-1.09	-0.98	-1.03
PT_{FC}	-0.127	0.0006	----	----	----	----	----	----

Table 3.1: Household Sector

3.1.1: Consumption

Sample: 1980:1 1994:4

DLOG(C86/LFPOP) = 0.2*DLOG(YPERM)+CC(1)*(RFCP90(-2)-RGCB10(-2))
+CC(2)*(RFCP90(-4)-RGCB10(-4))+CC(3)*(LFNUR-LFUR)+CC(4)*[LOG(C86(-1)/LFPOP(-1))-
CC(0)-CC(5)*LOG(YPERM(-1))-CC(6)*RRLT(-1)]

Coefficient	Value	Standard error	t-statistic	p-value
CC(1)	-0.002253	0.000739	-3.048701	0.0036
CC(2)	-0.002080	0.000797	-2.608225	0.0118
CC(3)	0.001592	0.000756	2.104638	0.0401
CC(4)	-0.209932	0.055153	-3.806340	0.0004
CC(0)	-0.558103	0.249178	-2.239777	0.0293
CC(5)	1.215135	0.094570	12.84910	0.0000
CC(6)	-0.007379	0.004178	-1.765963	0.0832

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.431019	LM(1)	0.040182	Mean percent error	0.003896	-0.297271
SER	0.006932	LM(4)	0.086877	Mean percent abs. error	0.693689	0.984352
SDDV	0.009189	ARCH(2)	0.246516	Theil inequality coef.	0.004552	0.005638
MPAE.FIT	0.503400	WHITE	0.127785	Bias proportion	3.16E-06	0.062548
MPAE.ISDF	0.689589	Normality	0.589953	Variance proportion	0.004684	0.591736
MPE.ISDF	-0.006601	RESET(2)	0.014038	Covariance proportion	0.995312	0.345715

3.1.2: Residential Investment

Sample: 1976:3 1994:4

DLOG(IRC86/LFPOP) = IRCC(1)*(LFNUR-LFUR)+IRCC(2)*(RFCP90(-3)-
RGCB10(-3))+IRCC(3)*DLOG(IRC86(-1)/LFPOP(-1))
+IRCC(4)*[LOG(IRC86(-1)/LFPOP(-1))-IRCC(0)-IRCC(5)*LOG(YPE
RM(-1))-IRCC(6)*UCS_P(-1)]

Coefficient	Value	Standard error	t-statistic	p-value
IRCC(1)	0.015729	0.005340	2.945647	0.0044
IRCC(2)	-0.010922	0.002676	-4.082055	0.0001
IRCC(3)	0.442650	0.095587	4.630851	0.0000
IRCC(4)	-0.534695	0.084700	-6.312800	0.0000
IRCC(0)	-4.057354	0.328850	-12.33801	0.0000
IRCC(5)	1.673657	0.120730	13.86280	0.0000
IRCC(6)	-1.536348	0.417250	-3.682084	0.0005

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.453508	LM(1)	0.316236	Mean percent error	2.674524	3.267983
SER	0.031396	LM(4)	0.278533	Mean percent abs. error	4.616796	5.098070
SDDV	0.042470	ARCH(2)	0.545660	Theil inequality coef.	0.029140	0.030440
MPAE.FIT	2.265015	WHITE	0.323168	Bias proportion	0.187176	0.255938
MPAE.ISDF	3.489110	Normality	0.056180	Variance proportion	0.005111	0.000856
MPE.ISDF	-0.002683	RESET(2)	0.918756	Covariance proportion	0.807712	0.743204

Table 3.1: Household Sector (Continued...)

3.1.3: Rent Consumption
Sample: 1947:2 1994:4
CRENT86 = 0.9946*CRENT86(-1)+CRENTC(1)*IRC86

Coefficient	Value	Standard error	t-statistic	p-value
CRENTC(1)	0.027195	0.000353	77.13264	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.999973	LM(1)	0.559624	Mean percent error	0.008067	-0.286292
SER	102.5117	LM(4)	0.043365	Mean percent abs. error	0.196383	0.315104
SDDV	19748.90	ARCH(2)	0.000800	Theil inequality coef.	0.001212	0.001903
MPAE.FIT	0.455027	WHITE	0.106684	Bias proportion	0.004036	0.534222
MPAE.ISDF	1.098769	Normality	6.74E-10	Variance proportion	0.532675	0.256901
MPE.ISDF	-0.409687	RESET(2)	0.015149	Covariance proportion	0.463288	0.208876

3.1.4: Fuel Consumption
Sample: 1976:1 1994:4
DLOG(CFUEL) = CFUELC(0) + CFUELC(1)*DLOG(C86) +
CFUELC(2)*(RFCP90(-3)-RGCB10(-3)) + CFUELC(3)*DLOG(CFUEL(-1))

Coefficient	Value	Standard error	t-statistic	p-value
CFUELC(0)	-0.003043	0.002315	-1.314391	0.1929
CFUELC(1)	0.683799	0.231043	2.959613	0.0042
CFUELC(2)	-0.003832	0.001162	-3.298462	0.0015
CFUELC(3)	-0.323508	0.107969	-2.996307	0.0037

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.264292	LM(1)	0.242789	Mean percent error	0.139323	0.876046
SER	0.016235	LM(4)	0.128134	Mean percent abs. error	1.065627	1.189838
SDDV	0.018928	ARCH(2)	0.292814	Theil inequality coef.	0.006076	0.007226
MPAE.FIT	1.300783	WHITE	0.017809	Bias proportion	0.011064	0.346603
MPAE.ISDF	3.441801	Normality	0.816101	Variance proportion	0.008067	0.087075
MPE.ISDF	-1.528179	RESET(2)	0.052902	Covariance proportion	0.980868	0.566321

Table 3.2 Business Investment

3.2.1:Business Investment In Machinery And Equipment

Sample: 1978:1 1994:4

DLOG(IME86) = IMEC(1)*(LOG(YGDPC86(-1))-LOG(YGDPC86(-5)))
+IMEC(2)*DLOG(UCME(-1)/PGDPC(-1))+IMEC(3)*((YGDPC86(-1)/YGDPCP86(-1)-1)*100)
+IMEC(4)*[LOG(IME86(-1))+LOG(UCME(-1)/PGDPC(-1))-LOG(YGDPC86(-1))-IMEC(0)]

Coefficient	Value	Standard error	t-statistic	p-value
IMEC(1)	0.371388	0.164289	2.260579	0.0272
IMEC(2)	-0.124495	0.076562	-1.626073	0.1089
IMEC(3)	0.002665	0.001563	1.704683	0.0932
IMEC(4)	-0.080582	0.025732	-3.131572	0.0026
IMEC(0)	-3.823816	0.079984	-47.80732	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.271524	LM(1)	0.936459	Mean percent error	-0.636695	-1.876512
SER	0.032723	LM(4)	0.467066	Mean percent abs. error	5.803535	6.238208
SDDV	0.038339	ARCH(2)	0.120703	Theil inequality coef.	0.036453	0.038604
MPAE.FIT	2.371337	WHITE	0.115807	Bias proportion	0.011170	0.090034
MPAE.ISDF	4.982336	Normality	0.146263	Variance proportion	0.051785	0.163257
MPE.ISDF	0.175672	RESET(2)	0.151700	Covariance proportion	0.937044	0.746708

3.2.2: Business Investment In Construction

Sample: 1978:1 1994:4

DLOG(INRC86) = INRCC(1)*DLOG(YGDPC86(-1))+INRCC(2)*((YGDPC86(-1)/YGDPCP86(-1)-1)*100)
-0.05*[LOG(INRC86(-1))-LOG(YGDPC86(-1))+LOG(UCNRC(-1)/PGDPC(-1))-INRCC(0)]

Coefficient	Value	Standard error	t-statistic	p-value
INRCC(1)	0.580184	0.380099	1.526399	0.1318
INRCC(2)	0.003482	0.001411	2.467757	0.0162
INRCC(0)	-4.503567	0.107469	-41.90590	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.097157	LM(1)	0.165499	Mean percent error	-0.260454	0.010626
SER	0.036596	LM(4)	0.280146	Mean percent abs. error	6.332901	3.629834
SDDV	0.038515	ARCH(2)	0.802857	Theil inequality coef.	0.039035	0.022510
MPAE.FIT	2.822829	WHITE	0.907485	Bias proportion	0.004160	0.002590
MPAE.ISDF	5.204995	Normality	0.297397	Variance proportion	0.012067	0.123267
MPE.ISDF	-0.825266	RESET(2)	0.067565	Covariance proportion	0.983772	0.874141

Table 3.2: Business Investment (Continued...)

3.2.3: Business Non-Farm Inventory Stock

Sample: 1970:2 1994:4

DLOG(KINVB) = KINVBC(1)*DLOG(KINVB(-1))
+KINVBC(2)*LOG(YGDPC86(-1)/YGDPCN86(-1))+KINVBC(3)*[LOG(KINVB(-1))-
LOG(YGDPC86(-1))-KINVBC(0)-KINVBC(4)*UCINV(-1)-KINVBC(5)*COMPUTER(-1)]

Coefficient	Value	Standard error	t-statistic	p-value
KINVBC(1)	0.370460	0.079336	4.669502	0.0000
KINVBC(2)	0.109526	0.046113	2.375175	0.0196
KINVBC(3)	-0.087478	0.019326	-4.526445	0.0000
KINVBC(0)	-1.094388	0.035505	-30.82346	0.0000
KINVBC(4)	-0.988851	0.279564	-3.537122	0.0006
KINVBC(5)	-2.807333	0.376327	-7.459824	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.628841	LM(1)	0.110361	Mean percent error	-0.058752	0.133879
SER	0.007210	LM(4)	0.133204	Mean percent abs. error	0.865204	0.500474
SDDV	0.011835	ARCH(2)	0.915859	Theil inequality coef.	0.005131	0.002968
MPAE.FIT	0.541186	WHITE	0.236132	Bias proportion	0.003584	0.047540
MPAE.ISDF	1.164777	Normality	0.545929	Variance proportion	0.007205	0.017844
MPE.ISDF	0.034896	RESET(2)	0.101131	Covariance proportion	0.989210	0.934615

Table 3.3 Trade Flows And Balance Of Payments

3.3.1: Imports Of Commodities

Sample: 1982:1 1994:4

DLOG(MC86) = MCC(1)*DLOG(MCACT)+MCC(2)*DLOG(MCACT(-1))
+MCC(3)*[LOG(MC86(-1))-MCC(0)-MCC(4)*LOG(MCACT(-1))-MCC(5)*LOG(PRMC(-1))]

Coefficient	Value	Standard error	t-statistic	p-value
MCC(1)	1.344804	0.344984	3.898163	0.0003
MCC(2)	0.584288	0.351130	1.664022	0.1029
MCC(3)	-0.460619	0.108782	-4.234342	0.0001
MCC(0)	-4.246597	1.681695	-2.525189	0.0151
MCC(4)	1.405324	0.161356	8.709485	0.0000
MCC(5)	-0.305710	0.196270	-1.557599	0.1262

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.567140	LM(1)	0.860847	Mean percent error	-3.530241	-4.906265
SER	0.026046	LM(4)	0.229680	Mean percent abs. error	3.874170	5.128426
SDDV	0.039589	ARCH(2)	0.638336	Theil inequality coef.	0.026253	0.036092
MPAE.FIT	2.125385	WHITE	0.182643	Bias proportion	0.540408	0.561477
MPAE.ISDF	2.562077	Normality	0.257115	Variance proportion	0.345026	0.375365
MPE.ISDF	0.090613	RESET(2)	0.343689	Covariance proportion	0.114566	0.063159

3.3.2: Imports Of End Products

Sample: 1982:1 1994:4

DLOG(MM86) = MMC(1)*DLOG(MMACT)+MMC(2)*[LOG(MM86(-1))-MMC(0)
-MMC(3)*LOG(MMACT(-1))-MMC(4)*LOG(PRMM(-1))]

Coefficient	Value	Standard error	t-statistic	p-value
MMC(1)	2.060368	0.210448	9.790378	0.0000
MMC(2)	-0.182348	0.074037	-2.462921	0.0175
MMC(0)	-0.704917	3.674633	-0.191833	0.8487
MMC(3)	1.055887	0.331168	3.188374	0.0025
MMC(4)	-0.729335	0.510189	-1.429538	0.1595

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.660900	LM(1)	0.092499	Mean percent error	-1.125098	-5.926576
SER	0.023895	LM(4)	0.095865	Mean percent abs. error	2.194669	6.060077
SDDV	0.041033	ARCH(2)	0.864733	Theil inequality coef.	0.013631	0.034918
MPAE.FIT	1.774775	WHITE	0.138762	Bias proportion	0.193215	0.800640
MPAE.ISDF	2.439274	Normality	0.864641	Variance proportion	0.058788	0.097922
MPE.ISDF	-0.043312	RESET(2)	0.397921	Covariance proportion	0.747997	0.101438

Table 3.3 Trade Flows And Balance Of Payments (Continued...)

3.3.3: Imports Of Services

Sample: 1971:3 1994:4

DLOG(MS86) = MSC(1)*DLOG(MSACT)+MSC(2)*DLOG(MSACT(-1))
+MSC(3)*DLOG(PRMS)+MSC(4)*D(QMS90)+MSC(6)*[LOG(MS86(-1))-MSC(0)
-MSC(7)*LOG(MSACT(-1))-MSC(8)*LOG(PRMS(-1))-MSC(9)*QMS90(-1)-MSC(10)*QMS831]

Coefficient	Value	Standard error	t-statistic	p-value
MSC(1)	1.347410	0.221549	6.081764	0.0000
MSC(2)	0.534896	0.214657	2.491862	0.0147
MSC(3)	-0.859136	0.126493	-6.791973	0.0000
MSC(4)	0.141939	0.040899	3.470514	0.0008
MSC(6)	-0.428591	0.070528	-6.076884	0.0000
MSC(0)	0.020470	0.399939	0.051183	0.9593
MSC(7)	0.997846	0.039523	25.24702	0.0000
MSC(8)	-1.089706	0.083089	-13.11489	0.0000
MSC(9)	0.165036	0.018220	9.057984	0.0000
MSC(10)	-0.270850	0.062929	-4.304065	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1992Q1- 1994Q4	1-year	3-year*
Adj. R2	0.642246	LM(1)	0.951944	Mean error	1.062465	1.268095
SER	0.021433	LM(4)	0.480467	Mean abs. error	2.755765	2.455568
SDDV	0.035833	ARCH(2)	0.578649	Theil inequality coef.	0.018135	0.016781
MPAE.FIT	1.567774	WHITE	0.225605	Bias proportion	0.074224	0.127396
MPAE.ISDF	1.844040	Normality	0.531707	Variance proportion	0.001253	0.008324
MPE.ISDF	0.000696	RESET(2)	0.156133	Covariance proportion	0.924523	0.864280

3.3.4: Stock Of Domestic Assets Held By Foreigners

Sample: 1975:1 1994:4

D(KIL) = KILC(0)+KILC(1)*NXCA

Coefficient	Value	Standard error	t-statistic	p-value
KILC(0)	4094.661	811.9100	5.043245	0.0000
KILC(1)	-0.240973	0.049654	-4.853017	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.222072	LM(1)	0.876574	Mean percent error	-1.796246	-4.989450
SER	4802.949	LM(4)	0.023330	Mean percent abs. error	1.796246	4.989450
SDDV	5445.505	ARCH(2)	0.039430	Theil inequality coef.	0.011318	0.032639
MPAE.FIT	1.485655	WHITE	0.005679	Bias proportion	0.690683	0.698098
MPAE.ISDF	5.269791	Normality	0.662978	Variance proportion	0.133649	0.286185
MPE.ISDF	4.350778	RESET(2)	0.924722	Covariance proportion	0.175667	0.015717

* Forecast performance test is based on 3 years.

Table 3.3 Trade Flows And Balance Of Payments (Continued...)

3.3.5: Exports Of Commodities

Sample: 1974:2 1994:4

DLOG(XC86) = XCC(1)*DLOG(XCACT)+XCC(2)*DLOG(PRXC)
+XCC(3)*[LOG(XC86(-1))-XCC(0)-XCC(4)*LOG(XCACT(-1))-XCC(5)*(LOG(PRXC(-1))
+LOG(PGDPFC(-1)*(1+TAXRX(-1))*(1-SUBRX(-1)))-LOG(USPCMS(-1)*PFX(-1)))]

Coefficient	Value	Standard error	t-statistic	p-value
XCC(1)	1.021567	0.368538	2.771947	0.0070
XCC(2)	-0.242560	0.136487	-1.777166	0.0795
XCC(3)	-0.372341	0.076546	-4.864271	0.0000
XCC(0)	10.78645	0.040279	267.7944	0.0000
XCC(4)	1.109052	0.066183	16.75747	0.0000
XCC(5)	-0.446855	0.078702	-5.677823	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.312211	LM(1)	0.731140	Mean percent error	-0.775420	-2.221801
SER	0.026308	LM(4)	0.499534	Mean percent abs. error	1.551011	2.593596
SDDV	0.031722	ARCH(2)	0.507285	Theil inequality coef.	0.009734	0.015149
MPAE.FIT	1.947903	WHITE	0.751569	Bias proportion	0.146470	0.553506
MPAE.ISDF	2.418884	Normality	0.016439	Variance proportion	0.060629	0.001040
MPE.ISDF	0.129567	RESET(2)	0.266634	Covariance proportion	0.792901	0.445454

3.3.6: Exports Of End Products

Sample: 1982:1 1994:4

DLOG(XM86) = XMC(1)*DLOG(XMACT(-1))+XMC(2)*DLOG(PRXM)
+XMC(3)*[LOG(XM86(-1))-XMC(0)-XMC(4)*LOG(XMACT(-1))-XMC(5)*LOG(PRXM(-1))]

Coefficient	Value	Standard error	t-statistic	p-value
XMC(1)	2.740227	0.802507	3.414585	0.0013
XMC(2)	-2.040295	0.482704	-4.226803	0.0001
XMC(3)	-0.604152	0.134485	-4.492342	0.0000
XMC(0)	10.47093	0.070092	149.3888	0.0000
XMC(4)	1.438653	0.195330	7.365258	0.0000
XMC(5)	-1.539300	0.242582	-6.345485	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.433705	LM(1)	0.853354	Mean percent error	-0.325224	2.292656
SER	0.042182	LM(4)	0.154723	Mean percent abs. error	4.737065	4.814341
SDDV	0.056054	ARCH(2)	0.505034	Theil inequality coef.	0.030759	0.029394
MPAE.FIT	3.376096	WHITE	0.221979	Bias proportion	0.030688	0.063371
MPAE.ISDF	3.480744	Normality	0.376873	Variance proportion	0.435934	0.412779
MPE.ISDF	0.177342	RESET(2)	0.074903	Covariance proportion	0.533378	0.523849

Table 3.3 Trade Flows And Balance Of Payments (Continued...)

3.3.7: Exports Of Services
Sample: 1982:1 1994:4
DLOG(XS86) = XSC(1)*DLOG(XSACT)+XSC(2)*[LOG(XS86(-1))-XSC(0)
-XSC(3)*LOG(XSACT(-1))-XSC(4)*LOG(PRXS(-1))]

Coefficient	Value	Standard error	t-statistic	p-value
XSC(1)	2.157033	0.708608	3.044042	0.0038
XSC(2)	-0.560761	0.118035	-4.750818	0.0000
XSC(0)	9.703333	0.023732	408.8752	0.0000
XSC(3)	1.473699	0.072183	20.41623	0.0000
XSC(4)	-0.383899	0.143189	-2.681054	0.0101

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.455296	LM(1)	0.030101	Mean percent error	-0.867442	-0.839064
SER	0.027947	LM(4)	0.154298	Mean percent abs. error	1.529002	1.596366
SDDV	0.037866	ARCH(2)	0.458482	Theil inequality coef.	0.010664	0.010671
MPAE.FIT	2.115044	WHITE	0.474997	Bias proportion	0.207707	0.194890
MPAE.ISDF	2.119885	Normality	0.567203	Variance proportion	0.447153	0.426095
MPE.ISDF	0.172682	RESET(2)	0.071919	Covariance proportion	0.345140	0.379015

3.3.8: Implicit Rate Of Return On Foreign Assets Held By Canadians
Sample: 1980:1 1994:4
D(RXSIID) = RXSIIDC(1)*[RXSIID(-1)-RXSIIDC(0)-RXSIIDC(2)*@MOVAV(USRGB3(-1),12)
-RXSIIDC(3)*@MOVAV(USRGB10(-1),40)]
+RXSIIDC(4)*D(@MOVAV(USRGB3(-1),12))+RXSIIDC(5)*D(@MOVAV(USRGB10(-1),40))

Coefficient	Value	Standard error	t-statistic	p-value
RXSIIDC(1)	-0.871705	0.128929	-6.761108	0.0000
RXSIIDC(0)	-1.051388	1.553528	-0.676774	0.5014
RXSIIDC(2)	0.233928	0.074549	3.137896	0.0028
RXSIIDC(3)	0.460884	0.172141	2.677367	0.0098
RXSIIDC(4)	2.422119	0.805749	3.006046	0.0040
RXSIIDC(5)	-1.845267	0.850387	-2.169915	0.0344

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.435699	LM(1)	0.290817	Mean error	0.733716	1.404806
SER	0.902899	LM(4)	0.219039	Mean abs. error	0.753279	1.404806
SDDV	1.201942	ARCH(2)	0.293172	Theil inequality coef.	0.094638	0.145360
MPAE.FIT	0.612642	WHITE	0.666081	Bias proportion	0.614130	0.844485
MPAE.ISDF	0.614197	Normality	0.000000	Variance proportion	0.005280	0.135577
MPE.ISDF	0.014543	RESET(2)	0.049524	Covariance proportion	0.380590	0.019938

Table 3.3 Trade Flows And Balance Of Payments (Continued...)

3.3.9: Dividend Payments To Non-Residents

Sample: 1976:1 1994:4

DLOG(MSD) = MSDC(1)*[LOG(MSD(-1))-MSDC(0)-MSDC(2)*LOG(YBPROFDP(-1))]
+MSDC(3)*DLOG(MSD(-4))+MSDC(4)*DLOG(YBPROFDP(-2))

Coefficient	Value	Standard error	t-statistic	p-value
MSDC(1)	-0.477863	0.086423	-5.529366	0.0000
MSDC(0)	-4.075386	1.465289	-2.781284	0.0069
MSDC(2)	1.174482	0.138758	8.464229	0.0000
MSDC(3)	-0.219494	0.096246	-2.280538	0.0256
MSDC(4)	-0.738965	0.297319	-2.485428	0.0153

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.313571	LM(1)	0.241012	Mean percent error	-7.764253	-12.05082
SER	0.186358	LM(4)	0.784993	Mean percent abs. error	13.89851	16.45598
SDDV	0.224932	ARCH(2)	0.652781	Theil inequality coef.	0.095786	0.103932
MPAE.FIT	13.61869	WHITE	0.689207	Bias proportion	0.232679	0.416899
MPAE.ISDF	15.73573	Normality	0.033099	Variance proportion	0.044692	0.022655
MPE.ISDF	1.219850	RESET(2)	0.667915	Covariance proportion	0.722630	0.560447

3.3.10: Implicit Rate Of Return On Domestic Assets Held By Foreigners

Sample: 1979:1 1994:4

D(RMSIID) = RMSIIDC(1)*[RMSIID(-1)-RMSIIDC(0)-RMSIIDC(2)*@MOVAV(RGCB10(-1),40)
-RMSIIDC(3)*RGCB13(-1)]+RMSIIDC(4)*D(@MOVAV(RGCB10(-1),40))
+RMSIIDC(5)*D(RGCB13)+RMSIIDC(6)*D(RMSIID(-4))

Coefficient	Value	Standard error	t-statistic	p-value
RMSIIDC(1)	-0.617592	0.113736	-5.430050	0.0000
RMSIIDC(0)	0.355525	0.956449	0.371714	0.7115
RMSIIDC(2)	0.515291	0.075019	6.868772	0.0000
RMSIIDC(3)	0.128445	0.052715	2.436609	0.0180
RMSIIDC(4)	2.063234	0.873446	2.362176	0.0216
RMSIIDC(5)	0.177311	0.044112	4.019538	0.0002
RMSIIDC(6)	-0.176905	0.093748	-1.887020	0.0643

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.454669	LM(1)	0.891009	Mean error	0.280469	0.656987
SER	0.368864	LM(4)	0.912489	Mean abs. error	0.311637	0.656987
SDDV	0.499501	ARCH(2)	0.827204	Theil inequality coef.	0.027410	0.049962
MPAE.FIT	0.260621	WHITE	0.957864	Bias proportion	0.564861	0.885778
MPAE.ISDF	0.283023	Normality	0.000000	Variance proportion	0.092797	0.005448
MPE.ISDF	-0.004020	RESET(2)	0.967462	Covariance proportion	0.342343	0.108774

Table 3.3 Trade Flows And Balance Of Payments (Continued...)

3.3.11: Exchange Rate With U.S.

Sample: 1972:1 1994:4

LOG(PFX) = PFXEC(0)+(PFXEC(2)+PFXEC(4)*QPFX76)*LOG(PFX(-1))
+(1-PFXEC(2)-PFXEC(4)*QPFX76)*LOG(@MOVAV(PGDP,5))/@MOVAV(USPGDP,5))
+PFXEC(3)*LOG(PXEN/PC/(PXEN(-1)/PC(-1)+PXEN(-2)/PC(-2))/2)+PFXEC(1)*(RFCP90-USRFCP90)

Coefficient	Value	Standard error	t-statistic	p-value
PFXEC(0)	-0.000797	0.019071	-0.041789	0.9668
PFXEC(2)	1.038674	0.034658	29.96921	0.0000
PFXEC(4)	-0.102974	0.041677	-2.470772	0.0154
PFXEC(3)	-0.005703	0.013859	-0.411532	0.6817
PFXEC(1)	-0.002196	0.001225	-1.793046	0.0764

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.979407	LM(1)	0.001773	Mean error	-0.021782	-0.043020
SER	0.015633	LM(4)	0.000037	Mean abs. error	0.038214	0.062001
SDDV	0.108937	ARCH(2)	0.268832	Theil inequality coef.	0.019336	0.034011
MPAE.FIT	0.014168	WHITE	0.694017	Bias proportion	0.210791	0.270780
MPAE.ISDF	0.053040	Normality	0.438278	Variance proportion	0.191858	0.648400
MPE.ISDF	0.025311	RESET(2)	0.791499	Covariance proportion	0.597351	0.080821

Table 3.4 Labour Market

3.4.1: Average Weekly Hours In The Commercial Sector

Sample: 1976:1 1994:4

LOG(LFAHC)-LOG(LFAHCN) = LFAHCC(1)*(LOG(YGDPC86)-LOG(YGDPCP86))
+LFAHCC(2)*(LOG(LFAHC(-1))-LOG(LFAHCN(-1)))

Coefficient	Value	Standard error	t-statistic	p-value
LFAHCC(1)	0.137259	0.028033	4.896327	0.0000
LFAHCC(2)	0.368686	0.099184	3.717186	0.0004

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.603510	LM(1)	0.766894	Mean percent error	-0.044202	-0.041658
SER	0.006027	LM(4)	0.738067	Mean percent abs. error	0.330717	0.327245
SDDV	0.009572	ARCH(2)	0.689337	Theil inequality coef.	0.002250	0.002150
MPAE.FIT	0.454206	WHITE	0.836124	Bias proportion	0.010568	0.010395
MPAE.ISDF	0.509953	Normality	0.122249	Variance proportion	0.102170	0.172118
MPE.ISDF	-0.046593	RESET(2)	0.980102	Covariance proportion	0.887262	0.817487

3.4.2: Employment In The Commercial Sector

Sample: 1970:2 1994:4

LOG(LFEC)-LOG(LFC) = LFECC(0)+LFECC(1)*(LOG(PX(-1)/PM(-1))-LTOTT(-1))
+LFECC(2)*(LOG(PCNDEN/PC)-LRPET)+LFECC(3)*LDGAP
+LFECC(4)*LWGAP(-1)+LFECC(5)*LUIGEN+LFECC(6)*LUNION
+LFECC(8)*(LOG(LFEC(-1))-LOG(LFC(-1)))+LFECC(9)*(LOG(LFEC(-2))-LOG(LFC(-2)))

Coefficient	Value	Standard error	t-statistic	p-value
LFECC(0)	0.032252	0.010848	2.973123	0.0038
LFECC(1)	0.021380	0.011030	1.938380	0.0557
LFECC(2)	-0.020924	0.009949	-2.103128	0.0382
LFECC(3)	0.119284	0.017501	6.815836	0.0000
LFECC(4)	-0.021574	0.009020	-2.391804	0.0188
LFECC(5)	-0.003155	0.001128	-2.798091	0.0063
LFECC(6)	-0.072986	0.039806	-1.833546	0.0700
LFECC(8)	0.936611	0.103097	9.084781	0.0000
LFECC(9)	-0.205042	0.084088	-2.438432	0.0167

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.984167	LM(1)	0.033240	Mean percent error	0.178993	0.420935
SER	0.002837	LM(4)	0.095120	Mean percent abs. error	0.266363	0.448798
SDDV	0.022543	ARCH(2)	0.035366	Theil inequality coef.	0.001721	0.002640
MPAE.FIT	0.211936	WHITE	0.002418	Bias proportion	0.270824	0.630066
MPAE.ISDF	0.402574	Normality	0.804691	Variance proportion	0.015288	0.000561
MPE.ISDF	-0.023154	RESET(2)	0.008950	Covariance proportion	0.713887	0.369373

Table 3.4 Labour Market (Continued...)						
3.4.3: Participation Rate Sample: 1978:1 1994:4 LOG(LFPR)-LOG(LFPRT) = LFPRC(1)*LOG(LFUR/LFNUR) +LFPRC(2)*(LOG(LFPR(-1))-LOG(LFPRT(-1)))						
Coefficient	Value	Standard error	t-statistic	p-value		
LFPRC(1)	-0.016479	0.003265	-5.046622	0.0000		
LFPRC(2)	0.649303	0.072219	8.990707	0.0000		
Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.892478	LM(1)	1.000000	Mean error	0.075987	0.107149
SER	0.002416	LM(4)	0.430073	Mean abs. error	0.186038	0.236194
SDDV	0.007367	ARCH(2)	0.153960	Theil inequality coef.	0.001568	0.002044
MPAE.FIT	0.122651	WHITE	0.660169	Bias proportion	0.134037	0.156791
MPAE.ISDF	0.156816	Normality	0.725444	Variance proportion	0.568442	0.571276
MPE.ISDF	-0.050971	RESET(2)	0.319261	Covariance proportion	0.297521	0.271934

Table 3.5: Supply Side

3.5.1: Commercial Sector Real GDP

Sample: 1980:1 1994:4

DLOG(YGDPC86/YGDPCN86) = YGDPCC(1)*DLOG((S86-M86)/YGDPCN86)
+YGDPCC(2)*(LOG(PGDPFC)-LOG(COST))+YGDPCC(3)*(LOG(KINVB)-LOG(KINVBD))
+YGDPCC(4)*[LOG(YGDPC86(-1)/YGDPCN86(-1))
-YGDPCC(0)-YGDPCC(5)*LOG((S86(-1)-M86(-1))/YGDPCN86(-1))]

Coefficient	Value	Standard error	t-statistic	p-value
YGDPCC(1)	0.562832	0.081810	6.879781	0.0000
YGDPCC(2)	0.162247	0.090971	1.783505	0.0801
YGDPCC(3)	-0.049675	0.020693	-2.400603	0.0198
YGDPCC(4)	-0.255362	0.079896	-3.196180	0.0023
YGDPCC(0)	-0.097363	0.033838	-2.877351	0.0057
YGDPCC(5)	0.724886	0.283853	2.553735	0.0135

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.677836	LM(1)	0.555465	Mean percent error	0.299484	0.667785
SER	0.006365	LM(4)	0.276448	Mean percent abs. error	0.435799	0.699360
SDDV	0.011214	ARCH(2)	0.044649	Theil inequality coef.	0.002660	0.004036
MPAE.FIT	0.479235	WHITE	0.968562	Bias proportion	0.321162	0.683174
MPAE.ISDF	0.657913	Normality	0.015241	Variance proportion	0.054214	0.022550
MPE.ISDF	-0.060311	RESET(2)	0.438528	Covariance proportion	0.624625	0.294277

3.5.2: Implicit Price Deflator For GDP At Factor Costs

Sample: 1971:3 1994:4

DLOG(PGDPFC) = PGDPFCC(1)*DLOG(COST)+PGDPFCC(2)*DLOG(COST(-1))
+PGDPFCC(3)*DLOG(PM(-1))+PGDPFCC(4)*(LOG(PGDPFC(-1))-LOG(COST(-1)))

Coefficient	Value	Standard error	t-statistic	p-value
PGDPFCC(1)	0.400713	0.048317	8.293423	0.0000
PGDPFCC(2)	0.297208	0.059797	4.970245	0.0000
PGDPFCC(3)	0.056216	0.055502	1.012862	0.3138
PGDPFCC(4)	-0.126658	0.035821	-3.535889	0.0006

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.567254	LM(1)	1.000000	Mean percent error	0.022854	-0.167555
SER	0.007574	LM(4)	0.441204	Mean percent abs. error	0.592955	0.501648
SDDV	0.011514	ARCH(2)	0.758164	Theil inequality coef.	0.003419	0.003204
MPAE.FIT	0.593478	WHITE	0.298186	Bias proportion	0.000589	0.074281
MPAE.ISDF	1.830444	Normality	0.721400	Variance proportion	0.116113	0.235988
MPE.ISDF	-1.318809	RESET(2)	0.528146	Covariance proportion	0.883298	0.689731

Table 3.6: Transaction And Factor Prices

3.6.1: Implicit Price Deflator For Consumption

Sample: 1971:2 1994:4

LOG(PC/((1+TAXRC)*(1-SUBRC)))-LOG(PC(-1)/((1+TAXRC(-1))*(1-SUBRC(-1)))) = PCC(0)
+PCC(1)*DLOG(PGDPFCXX)+PCC(2)*DLOG(PM)
+PCC(3)*(LOG(PC(-1)/((1+TAXRC(-1))*(1-SUBRC(-1))))-LOG(PM(-1)))
+PCC(4)*(LOG(PGDPFCXX(-1))-LOG(PM(-1)))

Coefficient	Value	Standard error	t-statistic	p-value
PCC(0)	-0.017711	0.005730	-3.090708	0.0027
PCC(1)	0.507131	0.063026	8.046338	0.0000
PCC(2)	0.200113	0.035632	5.616022	0.0000
PCC(3)	-0.128226	0.034047	-3.766119	0.0003
PCC(4)	0.096606	0.027660	3.492662	0.0007

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.714974	LM(1)	0.579874	Mean percent error	0.499318	-0.265728
SER	0.005637	LM(4)	0.682385	Mean percent abs. error	0.969756	0.839762
SDDV	0.010559	ARCH(2)	0.590546	Theil inequality coef.	0.006495	0.006080
MPAE.FIT	0.393088	WHITE	0.831255	Bias proportion	0.155607	0.040950
MPAE.ISDF	0.911960	Normality	0.000000	Variance proportion	0.249534	0.417835
MPE.ISDF	-0.112344	RESET(2)	0.137703	Covariance proportion	0.594859	0.541215

3.6.2: Implicit Price Deflator For Rent Consumption

Sample: 1973:2 1994:4

LOG(PCRENT/((1+TAXRCRNT)*(1-SUBRRENT))) = PCRENTC(0)+@MOVAV(LOG(PGDPFC),10)

Coefficient	Value	Standard error	t-statistic	p-value
PCRENTC(0)	-0.124896	0.001595	-78.30306	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.998596	LM(1)	0.000000	Mean percent error	-0.211572	-0.291735
SER	0.014877	LM(4)	0.000000	Mean percent abs. error	0.685041	0.648451
SDDV	0.397119	ARCH(2)	0.068791	Theil inequality coef.	0.004440	0.004380
MPAE.FIT	1.161013	WHITE	----	Bias proportion	0.046059	0.096170
MPAE.ISDF	1.138318	Normality	0.793856	Variance proportion	0.744035	0.704375
MPE.ISDF	0.047252	RESET(2)	0.000004	Covariance proportion	0.209905	0.199455

Table 3.6: Transaction And Factor Prices (Continued...)

3.6.3: Implicit Price Deflator For Food Consumption

Sample: 1971:3 1994:4

DLOG(PCNDF/((1+TAXRFOOD)*(1-SUBRFOOD))) = PCNDFC(1)*DLOG(PGDPFC) +PCNDFC(2)*DLOG(USPFOOD*PFX)+(1-PCNDFC(1)-PCNDFC(2))*DLOG(USPFOOD(-1)*PFX(-1))

Coefficient	Value	Standard error	t-statistic	p-value
PCNDFC(1)	0.770501	0.033314	23.12841	0.0000
PCNDFC(2)	0.136631	0.024603	5.553338	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.541395	LM(1)	0.345354	Mean percent error	-0.084863	-0.879155
SER	0.011835	LM(4)	0.218292	Mean percent abs. error	2.022375	2.287606
SDDV	0.017476	ARCH(2)	0.124517	Theil inequality coef.	0.012721	0.014624
MPAE.FIT	0.909856	WHITE	0.750845	Bias proportion	0.001157	0.089651
MPAE.ISDF	9.676464	Normality	0.214628	Variance proportion	0.341575	0.459473
MPE.ISDF	-9.667737	RESET(2)	0.334895	Covariance proportion	0.657268	0.450876

3.6.4: Implicit Price Deflator For Energy Consumption

Sample: 1985:1 1994:4

DLOG(PCNDEN/((1+TAXREN)*(1-SUBRENER))) = PCNDENC(1)*DLOG(PGDPFC) +PCNDENC(2)*DLOG(PXOILN)+(1-PCNDENC(1)-PCNDENC(2))*DLOG(PXOILN(-1))

Coefficient	Value	Standard error	t-statistic	p-value
PCNDENC(1)	0.832109	0.027112	30.69160	0.0000
PCNDENC(2)	0.089854	0.019903	4.514671	0.0001

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.533664	LM(1)	0.417439	Mean percent error	-1.277321	-4.958883
SER	0.021713	LM(4)	0.870943	Mean percent abs. error	1.971780	4.958883
SDDV	0.031796	ARCH(2)	0.859817	Theil inequality coef.	0.012772	0.026799
MPAE.FIT	1.628952	WHITE	0.014726	Bias proportion	0.239840	0.903398
MPAE.ISDF	9.966732	Normality	0.044618	Variance proportion	0.251692	0.000517
MPE.ISDF	9.966732	RESET(2)	0.000028	Covariance proportion	0.508469	0.096085

Table 3.6: Transaction And Factor Prices (Continued...)

3.6.5: Implicit Price Deflator For Residential Investment

Sample: 1971:2 1994:4

LOG(PIRC/((1+TAXRRC)*(1-SUBRIRC)))-LOG(PIRC(-1)/((1+TAXRRC(-1))*(1-SUBRIRC(-1)))) = PIRCC(0)+PIRCC(1)*DLOG(PGDPFC)+0.12*LOG(YGDP86/YGDPP86) +PIRCC(2)*(LOG(PIRC(-1)/((1+TAXRRC(-1))*(1-SUBRIRC(-1)))) -0.83*LOG(PGDPFC(-1))-0.17*LOG(PM(-1)))

Coefficient	Value	Standard error	t-statistic	p-value
PIRCC(0)	0.005945	0.002871	2.070605	0.0412
PIRCC(1)	0.488285	0.144416	3.381095	0.0011
PIRCC(2)	-0.052520	0.025002	-2.100628	0.0384

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.219196	LM(1)	0.035571	Mean percent error	-0.860258	1.669544
SER	0.016016	LM(4)	0.011658	Mean percent abs. error	2.916869	2.672318
SDDV	0.018126	ARCH(2)	0.003624	Theil inequality coef.	0.018734	0.016743
MPAE.FIT	1.157777	WHITE	0.260983	Bias proportion	0.062082	0.214245
MPAE.ISDF	4.583015	Normality	0.001090	Variance proportion	0.000018	0.466763
MPE.ISDF	0.398025	RESET(2)	0.000024	Covariance proportion	0.937899	0.318991

3.6.6: Implicit Price Deflator For Business Investment In Construction

Sample: 1971:3 1994:4

DLOG(PINRC/((1+TAXRNRC)*(1-SUBRINRC))) = PINRCC(0)+PINRCC(1)*DLOG(PGDPFC) +PINRCC(2)*DLOG(PGDPFC(-1))+PINRCC(3)*DLOG(PM) +PINRCC(4)*(LOG(PINRC(-1)/((1+TAXRNRC(-1))*(1-SUBRINRC(-1))))-LOG(PM(-1))) +PINRCC(5)*(LOG(PGDPFC(-1))-LOG(PM(-1)))+PINRCC(6)*LOG(YGDP86/YGDPP86)

Coefficient	Value	Standard error	t-statistic	p-value
PINRCC(0)	-0.013266	0.003376	-3.929693	0.0002
PINRCC(1)	0.695769	0.105331	6.605525	0.0000
PINRCC(2)	0.456429	0.098211	4.647440	0.0000
PINRCC(3)	0.068071	0.050448	1.349346	0.1807
PINRCC(4)	-0.155294	0.035859	-4.330643	0.0000
PINRCC(5)	0.131367	0.030257	4.341654	0.0000
PINRCC(6)	0.162785	0.031914	5.100813	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.722586	LM(1)	0.012927	Mean percent error	-0.668028	-0.320638
SER	0.007330	LM(4)	0.153710	Mean percent abs. error	1.441646	1.110888
SDDV	0.013916	ARCH(2)	0.799081	Theil inequality coef.	0.008440	0.007764
MPAE.FIT	0.562095	WHITE	0.946573	Bias proportion	0.163054	0.048463
MPAE.ISDF	1.127561	Normality	0.065199	Variance proportion	0.000023	0.169257
MPE.ISDF	0.082612	RESET(2)	0.450582	Covariance proportion	0.836923	0.782280

Table 3.6: Transaction And Factor Prices (Continued...)

3.6.7: Implicit Price Deflator For Business Investment In Machinery And Equipment

Sample: 1983:1 1994:4

LOG(PIME/((1+TAXRME)*(1-SUBRIME)))-LOG(PIME(-1)/((1+TAXRME(-1))*(1-SUBRIME(-1))))
= PIMEC(0)+0.4*DLOG(PGDPFC)+0.6*DLOG(USPIME*PFX)+PIMEC(1)*LOG(YGDP86(-1)/YGDPP86(-1))

Coefficient	Value	Standard error	t-statistic	p-value
PIMEC(0)	-0.008959	0.001657	-5.406722	0.0000
PIMEC(1)	0.132693	0.054242	2.446308	0.0183

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2*	-0.430411	LM(1)	0.527758	Mean percent error	0.519586	5.338621
SER	0.011069	LM(4)	0.807882	Mean percent abs. error	1.269542	5.410240
SDDV	0.009255	ARCH(2)	0.966045	Theil inequality coef.	0.008394	0.029113
MPAE.FIT	0.780440	WHITE	0.484751	Bias proportion	0.097859	0.743755
MPAE.ISDF	1.733669	Normality	0.020579	Variance proportion	0.041640	0.195273
MPE.ISDF	1.079817	RESET(2)	0.000132	Covariance proportion	0.860501	0.060972

3.6.8: Implicit Price Deflator For Government Expenditures On Non-Wage Goods And Services

Sample: 1974:1 1994:4

LOG(PGNWO/((1+TAXRGNW)*(1-SUBRGNW)))-LOG(PGNWO(-1)/((1+TAXRGNW(-1))*(1-SUBRGNW(-1))))
= PGNWC(1)*DLOG(PGDPFC)+(1-PGNWC(1))*DLOG(PGDPFC(-1))

Coefficient	Value	Standard error	t-statistic	p-value
PGNWC(1)	0.831084	0.309344	2.686601	0.0087

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.067104	LM(1)	0.000020	Mean percent error	-0.476279	0.591661
SER	0.027366	LM(4)	0.000131	Mean percent abs. error	1.209438	2.160042
SDDV	0.028333	ARCH(2)	0.000002	Theil inequality coef.	0.018528	0.019321
MPAE.FIT	1.085566	WHITE	0.829637	Bias proportion	0.025530	0.015432
MPAE.ISDF	7.227670	Normality	0.000000	Variance proportion	0.341911	0.177014
MPE.ISDF	7.074453	RESET(2)	0.433849	Covariance proportion	0.632559	0.807554

* Negative R2 is caused by restriction in the model

Table 3.6: Transaction And Factor Prices (Continued...)

3.6.9: Implicit Price Deflator For Government Expenditures On Gross Fixed Capital Formation

Sample: 1985:1 1994:4

LOG(PGCF/((1+TAXRGCF)*(1-SUBRGCF)))-LOG(PGCF(-1)/((1+TAXRGCF(-1))*(1-SUBRGCF(-1))))
= PGCFC(0)+0.74*DLOG(PGDPFC)+0.26*DLOG(PM)+PGCFC(1)*LOG(YGDP86/YGDPP86)

Coefficient	Value	Standard error	t-statistic	p-value
PGCFC(0)	-0.006595	0.001492	-4.420596	0.0001
PGCFC(1)	0.146538	0.051446	2.848395	0.0071

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.359634	LM(1)	0.872695	Mean percent error	-1.283049	-1.216158
SER	0.009393	LM(4)	0.523805	Mean percent abs. error	1.519577	1.844823
SDDV	0.011737	ARCH(2)	0.003921	Theil inequality coef.	0.008638	0.011000
MPAE.FIT	0.693827	WHITE	0.183060	Bias proportion	0.551197	0.295986
MPAE.ISDF	2.101685	Normality	0.061137	Variance proportion	0.030884	0.171372
MPE.ISDF	2.013420	RESET(2)	0.013011	Covariance proportion	0.417919	0.532642

3.6.10: Implicit Price Deflator For Imported Commodities

Sample: 1975:1 1994:4

DLOG(PMC) = PMCC(0)+PMCC(1)*DLOG(0.809*USPAC*PFX+0.029*OSPACJA*PFXJAP
+0.032*OSPACGR*PFXGER+0.022*OSPACIT*PFXITA+0.082*OSPACUK*PFXUK)
+PMCC(2)*DLOG(0.809*USPAC(-1)*PFX(1)+0.029*OSPACJA(-1)*PFXJAP(-1)
+0.032*OSPACGR(-1)*PFXGER(-1)+0.025*OSPACFR(-1)*PFXFRA(-1)+0.022*OSPACIT(-1)*PFXITA(-1)
+0.082*OSPACUK(-1)*PFXUK(-1))+PMCC(3)*DLOG(USPFOOD*PFX)+PMCC(4)*DLOG(USPCM*PFX)
+PMCC(5)*DLOG(PXOILN)+PMCC(6)*(LOG(PMC(-1))-0.87*LOG(USPCM(-1)*PFX(-1))
-0.13*LOG(PXOILN(-1)))+PMCC(7)*(LOG(USPFOOD(-1)*PFX(-1))-LOG(USPCM(-1)*PFX(-1)))

Coefficient	Value	Standard error	t-statistic	p-value
PMCC(0)	-0.053146	0.013821	-3.845305	0.0003
PMCC(1)	0.338759	0.155917	2.172685	0.0331
PMCC(2)	0.229693	0.140285	1.637323	0.1059
PMCC(3)	0.131529	0.067723	1.942176	0.0560
PMCC(4)	0.035697	0.069422	0.514207	0.6087
PMCC(5)	0.118907	0.017234	6.899669	0.0000
PMCC(6)	-0.164015	0.047759	-3.434228	0.0010
PMCC(7)	0.070860	0.034587	2.048725	0.0441

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1992Q1- 1994Q4	1-year	3-year
Adj. R2	0.638884	LM(1)	0.271695	Mean percent error	3.356648	13.78252
SER	0.018770	LM(4)	0.397300	Mean percent abs. error	3.411938	13.78252
SDDV	0.031234	ARCH(2)	0.995479	Theil inequality coef.	0.018759	0.084396
MPAE.FIT	1.417231	WHITE	0.398483	Bias proportion	0.774318	0.603898
MPAE.ISDF	6.432770	Normality	0.187497	Variance proportion	0.023861	0.327128
MPE.ISDF	-4.562237	RESET(2)	0.216009	Covariance proportion	0.201821	0.068973

Table 3.6: Transaction And Factor Prices (Continued...)

3.6.11: Implicit Price Deflator For Imported Services

Sample: 1975:1 1994:4

DLOG(PMS) = PMSC(0)+PMSC(1)*DLOG(USPGDP*PFX)
+PMSC(2)*(LOG(PMS(-1))-LOG(USPGDP(-1)*PFX(-1)))

Coefficient	Value	Standard error	t-statistic	p-value
PMSC(0)	-0.005585	0.003180	-1.756611	0.0830
PMSC(1)	0.896241	0.045211	19.82369	0.0000
PMSC(2)	-0.055118	0.024673	-2.233927	0.0284

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.876271	LM(1)	0.542751	Mean percent error	1.353727	2.882157
SER	0.006408	LM(4)	0.066445	Mean percent abs. error	1.520823	3.052400
SDDV	0.018216	ARCH(2)	0.426045	Theil inequality coef.	0.009167	0.019959
MPAE.FIT	0.500606	WHITE	0.314570	Bias proportion	0.560411	0.564157
MPAE.ISDF	1.744619	Normality	0.978699	Variance proportion	0.110821	0.386781
MPE.ISDF	-0.838731	RESET(2)	0.119299	Covariance proportion	0.328768	0.049062

3.6.12: Implicit Price Deflator For Exported Commodities

Sample: 1975:1 1994:4

DLOG(PXC) = PXCC(0)+PXCC(1)*DLOG(USPFOOD*PFX)+PXCC(2)*DLOG(USPCM*PFX)
+PXCC(3)*DLOG(PXOILN)+PXCC(4)*(LOG(PXC(-1))-0.25*LOG(USPFOOD(-1)*PFX(-1))
-0.58*LOG(USPCM(-1)*PFX(-1))-0.17*LOG(PXOILN(-1)))+PXCC(5)*QPXC91(-1)

Coefficient	Value	Standard error	t-statistic	p-value
PXCC(0)	-0.078000	0.012893	-6.049743	0.0000
PXCC(1)	0.086849	0.047465	1.829724	0.0713
PXCC(2)	0.205973	0.054234	3.797879	0.0003
PXCC(3)	0.121143	0.012924	9.373459	0.0000
PXCC(4)	-0.272197	0.040986	-6.641196	0.0000
PXCC(5)	-0.021847	0.005183	-4.214977	0.0001

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1992Q1- 1994Q4	1-year	3-year*
Adj. R2	0.703332	LM(1)	0.010026	Mean percent error	-0.077449	-9.328404
SER	0.015326	LM(4)	0.051723	Mean percent abs. error	3.946777	9.328404
SDDV	0.028138	ARCH(2)	0.575444	Theil inequality coef.	0.023068	0.052726
MPAE.FIT	1.221996	WHITE	0.360647	Bias proportion	0.000182	0.890198
MPAE.ISDF	4.973927	Normality	0.413039	Variance proportion	0.443754	0.078575
MPE.ISDF	-0.040027	RESET(2)	0.884056	Covariance proportion	0.556064	0.031227

* Forecasting performance test is based on 3 years.

Table 3.6: Transaction And Factor Prices (Continued...)

3.6.13: Implicit Price Deflator For Exported Services

Sample: 1975:1 1994:4

DLOG(PXS) = PXSC(0)+PXSC(1)*DLOG(PGDP)+PXSC(2)*DLOG(PGDP(-1))
+PXSC(3)*DLOG(PMS)+PXSC(4)*(LOG(PXS(-1))-LOG(PMS(-1)))
+PXSC(5)*(LOG(PGDP(-1))-LOG(PMS(-1)))

Coefficient	Value	Standard error	t-statistic	p-value
PXSC(0)	0.007024	0.003173	2.213361	0.0300
PXSC(1)	0.172965	0.183374	0.943237	0.3486
PXSC(2)	0.278625	0.185233	1.504192	0.1368
PXSC(3)	0.053905	0.056986	0.945927	0.3473
PXSC(4)	-0.119448	0.049141	-2.430727	0.0175
PXSC(5)	0.088055	0.035355	2.490605	0.0150

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.531799	LM(1)	0.000841	Mean percent error	-0.544118	-1.556048
SER	0.008095	LM(4)	0.006584	Mean percent abs. error	1.277705	1.693513
SDDV	0.011831	ARCH(2)	0.289534	Theil inequality coef.	0.007456	0.010055
MPAE.FIT	0.595146	WHITE	0.331602	Bias proportion	0.143617	0.637906
MPAE.ISDF	1.250987	Normality	0.378811	Variance proportion	0.036320	0.224560
MPE.ISDF	0.204843	RESET(2)	0.896011	Covariance proportion	0.820063	0.137534

3.6.14: Price Of Natural Resources

Sample: 1978:1 1994:4

LOG(PRAW) = PRAWC(0)+0.443*LOG(USPFOOD*PFX)
+0.342*LOG(USPCM*PFX)+0.215*LOG(PXOILN)+PRAWC(1)*QPRAW

Coefficient	Value	Standard error	t-statistic	p-value
PRAWC(0)	-0.227425	0.002892	-78.62606	0.0000
PRAWC(1)	-0.077969	0.009015	-8.648583	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.950432	LM(1)	0.000000	Mean percent error	NA	NA
SER	0.022591	LM(4)	0.000001	Mean percent abs. error	NA	NA
SDDV	0.101469	ARCH(2)	0.007073	Theil inequality coef.	NA	NA
MPAE.FIT	1.783742	WHITE	0.213355	Bias proportion	NA	NA
MPAE.ISDF	1.799628	Normality	0.551926	Variance proportion	NA	NA
MPE.ISDF	0.000359	RESET(2)	0.001768	Covariance proportion	NA	NA

Table 3.6: Transaction And Factor Prices (Continued...)

3.6.15: Commercial Sector Hourly Market Wage Rate

Sample: 1978:1 1994:4

DLOG(WRC+@MOVAV(YUIPPC*1000/(LFEC*LFAHC*52),8)
+@MOVAV(LFEC/LFE*TPYPRT*1000/(LFEC*LFAHC*52),8)) = @MOVAV(D(TFPCT(-1))
+D(TPRODC(-1)),16)/0.64+WRCC(0)+WRCC(1)*(LFUR-LFNUR)
+WRCC(2I)*PDL(PCPI(-1),3)+WRCC(3)*QAIB

Coefficient	Value	Standard error	t-statistic	p-value
WRCC(0)	0.000056	0.001244	0.045221	0.9640
WRCC(1)	-0.000885	0.000841	-1.052480	0.2965
WRCC(21)	0.644456	0.244130	2.639810	0.0104
WRCC(22)	0.285181	0.081377	3.504460	0.0008
WRCC(23)	0.070362	0.162753	0.432326	0.6669
WRCC(3)	-0.020979	0.007462	-2.811520	0.0065

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	NA	LM(1)	NA	Mean error	-0.025641	-0.204328
SER	0.009660	LM(4)	NA	Mean abs. error	0.197288	0.280740
SDDV	0.012312	ARCH(2)	0.950639	Theil inequality coef.	0.007944	0.011147
MPAE.FIT	0.087313	WHITE	NA	Bias proportion	0.011932	0.389654
MPAE.ISDF	0.251080	Normality	0.981985	Variance proportion	0.013007	0.368974
MPE.ISDF	0.249558	RESET(2)	NA	Covariance proportion	0.975060	0.241372

Table 3.7: Income Sector

3.7.1: Unincorporated Business Capital Consumption Allowances

Sample: 1966:1 1994:4

YPCCA = YPCCAC(0)+YPCCAC(1)*IRC+(1-YPCCAC(1))*YPCCA(-1)

Coefficient	Value	Standard error	t-statistic	p-value
YPCCAC(0)	107.5500	22.83329	4.710226	0.0000
YPCCAC(1)	0.009276	0.001736	5.343634	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.999593	LM(1)	0.422102	Mean percent error	-0.107032	0.373840
SER	153.0120	LM(4)	0.023270	Mean percent abs. error	1.395853	1.526600
SDDV	7587.788	ARCH(2)	0.207116	Theil inequality coef.	0.008102	0.008734
MPAE.FIT	1.267891	WHITE	0.000017	Bias proportion	0.001824	0.064583
MPAE.ISDF	13.81334	Normality	0.000000	Variance proportion	0.231970	0.578675
MPE.ISDF	8.962296	RESET(2)	0.007341	Covariance proportion	0.766205	0.356742

3.7.2: Corporation Capital Consumption Allowances

Sample: 1965:1 1994:4

YBCCA = YBCCAC(0)+YBCCAC(1)*(IME+INRC)+(1-YBCCAC(1))*YBCCA(-1)

Coefficient	Value	Standard error	t-statistic	p-value
YBCCAC(0)	2.378640	65.45792	0.036338	0.9711
YBCCAC(1)	0.019573	0.002764	7.080955	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.999491	LM(1)	0.344963	Mean percent error	-0.866377	-2.608576
SER	350.9699	LM(4)	0.371276	Mean percent abs. error	1.925616	2.608576
SDDV	15563.56	ARCH(2)	0.663380	Theil inequality coef.	0.011884	0.014669
MPAE.FIT	1.150608	WHITE	0.000775	Bias proportion	0.133724	0.804281
MPAE.ISDF	4.548851	Normality	0.000000	Variance proportion	0.006861	0.000017
MPE.ISDF	2.134838	RESET(2)	0.456155	Covariance proportion	0.859415	0.195702

Table 3.7: Income Sector (Continued...)

3.7.3: Net Income Of Non-Farm Unincorporated Business

Sample: 1968:2 1994:4

LOG((YUB-YUBRENT)/(YGDPC-YLC)) = YUBC(0) + YUBC(1)*LOG(X/YGDP)+YUBC(2)*AR(1)

Coefficient	Value	Standard error	t-statistic	p-value
YUBC(0)	-2.232558	0.167973	-13.29120	0.0000
YUBC(1)	-0.254985	0.110928	-2.298643	0.0235
YUBC(2)	0.966904	0.026911	35.92990	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.936236	LM(1)	0.032424	Mean percent error	-2.415085	-10.52825
SER	0.034108	LM(4)	0.114319	Mean percent abs. error	3.740801	10.52825
SDDV	0.135072	ARCH(2)	0.930711	Theil inequality coef.	0.022894	0.063315
MPAE.FIT	1.890218	WHITE	0.234481	Bias proportion	0.255043	0.807609
MPAE.ISDF	7.288170	Normality	0.482786	Variance proportion	0.316151	0.072541
MPE.ISDF	2.888274	RESET(2)	0.062939	Covariance proportion	0.428805	0.119850

3.7.4: Current Transfers From Persons To Corporation

Sample: 1972:1 1994:4

DLOG(TRBP) = TRBPC(0)+TRBPC(1)*LOG(TRBP(-1))+TRBPC(2)*LOG(RCBP(-1)*(C(-1)-CRENT(-1)))
+TRBPC(3)*DLOG(TRBP(-3))+TRBPC(4)*DLOG(RCBP*(C-CRENT))
+TRBPC(5)*DLOG(RCBP(-1)*(C(-1)-CRENT(-1)))

Coefficient	Value	Standard error	t-statistic	p-value
TRBPC(0)	-0.883654	0.325393	-2.715653	0.0080
TRBPC(1)	-0.140058	0.046070	-3.040095	0.0031
TRBPC(2)	0.140738	0.047984	2.933022	0.0043
TRBPC(3)	0.155237	0.069146	2.245077	0.0273
TRBPC(4)	0.210757	0.054255	3.884545	0.0002
TRBPC(5)	0.332488	0.065828	5.050863	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.619876	LM(1)	0.185024	Mean percent error	-0.027102	-4.293466
SER	0.046525	LM(4)	0.333454	Mean percent abs. error	3.736501	4.611594
SDDV	0.075462	ARCH(2)	0.061262	Theil inequality coef.	0.017952	0.026746
MPAE.FIT	3.502463	WHITE	0.192260	Bias proportion	0.026942	0.543252
MPAE.ISDF	8.401123	Normality	0.954584	Variance proportion	0.162838	0.012009
MPE.ISDF	0.188075	RESET(2)	0.632451	Covariance proportion	0.810221	0.444739

Table 3.7: Income Sector (Continued...)

3.7.5: Current Transfers From Corporation To Persons

Sample(adjusted): 1966:2 1994:4

TRPB/LFPOP/PC = TRPBC(0)+TRPBC(1)*(@MOVAV(YBPROFAT,4)/LFPOP/PC)
+TRPBC(2)*(TRPB(-1)/LFPOP(-1)/PC(-1))

Coefficient	Value	Standard error	t-statistic	p-value
TRPBC(0)	0.003625	0.001489	2.434951	0.0165
TRPBC(1)	0.000909	0.000427	2.128723	0.0355
TRPBC(2)	0.858964	0.044399	19.34639	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.786791	LM(1)	0.069623	Mean percent error	-2.670814	-9.760103
SER	0.001878	LM(4)	0.004834	Mean percent abs. error	2.861949	9.760103
SDDV	0.004067	ARCH(2)	0.581487	Theil inequality coef.	0.018726	0.055450
MPAE.FIT	3.773869	WHITE	0.222770	Bias proportion	0.522192	0.871877
MPAE.ISDF	7.732161	Normality	0.000000	Variance proportion	0.045070	0.007715
MPE.ISDF	1.083376	RESET(2)	0.305734	Covariance proportion	0.432739	0.120408

3.7.6: Net Rental Income Of Non-Farm Unincorporated Business

Sample: 1961:1 1994:4

DLOG(YUBRENT) = YUBRENTC(0)+YUBRENTC(1)*DLOG(YUBRENT(-1))
+YUBRENTC(2)*DLOG(CRENT(-3))+YUBRENTC(3)*LOG(YUBRENT(-1))
+YUBRENTC(4)*LOG(CRENT(-1))+YUBRENTC(5)*LOG(IRC(-1))

Coefficient	Value	Standard error	t-statistic	p-value
YUBRENTC(0)	-0.098714	0.039757	-2.482931	0.0143
YUBRENTC(1)	0.183338	0.082288	2.227998	0.0276
YUBRENTC(2)	1.559285	0.489607	3.184771	0.0018
YUBRENTC(3)	-0.034211	0.015969	-2.142318	0.0340
YUBRENTC(4)	0.149369	0.038298	3.900138	0.0002
YUBRENTC(5)	-0.119372	0.030606	-3.900303	0.0002

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.276455	LM(1)	0.320916	Mean percent error	4.483126	26.18902
SER	0.042877	LM(4)	0.118995	Mean percent abs. error	4.483126	26.18902
SDDV	0.050407	ARCH(2)	0.068995	Theil inequality coef.	0.028286	0.140243
MPAE.FIT	2.723957	WHITE	0.005311	Bias proportion	0.594360	0.707367
MPAE.ISDF	11.88089	Normality	0.000000	Variance proportion	0.032831	0.291333
MPE.ISDF	0.130845	RESET(2)	0.172781	Covariance proportion	0.372809	0.001300

Table 3.7: Income Sector (Continued...)

3.7.7: Mortgage Interest Payments

Sample: 1971:3 1994:4

DLOG(TRMORT) = TRMORTC(0)+TRMORTC(1)*DLOG(TRMORT(-1))
+TRMORTC(2)*D(RMC(-1))+TRMORTC(3)*LOG(TRMORT(-1))+TRMORTC(4)*LOG(IRC(-1))

Coefficient	Value	Standard error	t-statistic	p-value
TRMORTC(0)	-0.000938	0.042918	-0.021861	0.9826
TRMORTC(1)	0.086332	0.084763	1.018506	0.3112
TRMORTC(2)	0.012141	0.002368	5.127270	0.0000
TRMORTC(3)	-0.047611	0.010476	-4.544661	0.0000
TRMORTC(4)	0.047663	0.013041	3.654889	0.0004

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.488998	LM(1)	0.748950	Mean percent error	-0.936582	-2.176365
SER	0.018466	LM(4)	0.010594	Mean percent abs. error	1.795574	2.796063
SDDV	0.025832	ARCH(2)	0.999053	Theil inequality coef.	0.010411	0.016432
MPAE.FIT	1.330834	WHITE	0.553191	Bias proportion	0.233551	0.485683
MPAE.ISDF	3.253313	Normality	0.000000	Variance proportion	0.147002	0.109252
MPE.ISDF	0.848470	RESET(2)	0.643858	Covariance proportion	0.619447	0.405065

Table 3.8: Financial Markets

3.8.1: Three-Month Treasury Bill Rate
Sample: 1976:1 1994:4

RTB = RTBC(0)+RTBC(1)*RFCP90

Coefficient	Value	Standard error	t-statistic	p-value
RTBC(0)	0.122708	0.046657	2.629983	0.0104
RTBC(1)	0.964864	0.004391	219.7330	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.998449	LM(1)	0.000150	Mean error	0.025096	0.038780
SER	0.125045	LM(4)	0.002848	Mean abs. error	0.092773	0.102766
SDDV	3.175149	ARCH(2)	0.025203	Theil inequality coef.	0.006811	0.007532
MPAE.FIT	0.097204	WHITE	0.001733	Bias proportion	0.049923	0.097384
MPAE.ISDF	0.094905	Normality	0.007504	Variance proportion	0.612936	0.654602
MPE.ISDF	-0.003595	RESET(2)	0.008117	Covariance proportion	0.337141	0.248014

3.8.2: Non-Chequable Savings Deposit Rate
Sample: 1975:1 1994:4

RCBNC = RCBNCC(0)+RCBNCC(1)*Q81ON+RCBNCC(2)*RCBP+RCBNCC(3)*QT0487

Coefficient	Value	Standard error	t-statistic	p-value
RCBNCC(0)	1.860121	0.683871	2.719989	0.0081
RCBNCC(1)	-0.651865	0.233314	-2.793936	0.0066
RCBNCC(2)	1.014813	0.016341	62.10117	0.0000
RCBNCC(3)	-0.050029	0.006296	-7.945744	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.986329	LM(1)	0.000000	Mean error	0.467853	0.572355
SER	0.420955	LM(4)	0.000000	Mean abs. error	0.477963	0.572355
SDDV	3.600259	ARCH(2)	0.000000	Theil inequality coef.	0.075867	0.085010
MPAE.FIT	0.287506	WHITE	0.166538	Bias proportion	0.425715	0.502950
MPAE.ISDF	0.289657	Normality	0.000000	Variance proportion	0.013521	0.034433
MPE.ISDF	-0.001489	RESET(2)	0.064053	Covariance proportion	0.560764	0.462617

Table 3.8: Financial Markets (Continued...)

3.8.3: Chartered Bank Rate On Prime Business Loans
Sample: 1975:1 1994:4
RCBP = RCBPC(0)+RCBPC(1)*USRCBP+RCBPC(2)*RBANK+(1-RCBPC(1)-RCBPC(2))*RCBP(-1)

Coefficient	Value	Standard error	t-statistic	p-value
RCBPC(0)	0.865288	0.041555	20.82278	0.0000
RCBPC(1)	0.087816	0.023405	3.752046	0.0003
RCBPC(2)	0.736797	0.031167	23.64027	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.992085	LM(1)	0.000002	Mean error	0.175388	0.206444
SER	0.287341	LM(4)	0.000003	Mean abs. error	0.326872	0.344541
SDDV	3.229794	ARCH(2)	0.988285	Theil inequality coef.	0.021471	0.022607
MPAE.FIT	0.222112	WHITE	0.966586	Bias proportion	0.188525	0.235114
MPAE.ISDF	0.260025	Normality	0.471482	Variance proportion	0.242221	0.296765
MPE.ISDF	-0.000814	RESET(2)	0.000016	Covariance proportion	0.569254	0.468121

3.8.4: Average Yield On Government Of Canada Bonds, 1-3 Years
Sample: 1978:1 1994:4
RGCB13 = RGCB13C(0)+RGCB13C(1)*RFCP90(-1)+RGCB13C(2)*USRFCP90(-1)
+RGCB13C(3)*RFCP90+RGCB13C(4)*USRFCP90+RGCB13C(5)*USRGB3

Coefficient	Value	Standard error	t-statistic	p-value
RGCB13C(0)	0.781970	0.222670	3.511794	0.0008
RGCB13C(1)	0.214603	0.056008	3.831616	0.0003
RGCB13C(2)	-0.271611	0.061921	-4.386400	0.0000
RGCB13C(3)	0.482492	0.059926	8.051476	0.0000
RGCB13C(4)	-0.126393	0.067663	-1.867989	0.0665
RGCB13C(5)	0.633572	0.056520	11.20967	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.980644	LM(1)	0.004735	Mean error	0.020546	0.077543
SER	0.366095	LM(4)	0.024270	Mean abs. error	0.275571	0.276303
SDDV	2.631384	ARCH(2)	0.155390	Theil inequality coef.	0.019672	0.019803
MPAE.FIT	0.278223	WHITE	0.323727	Bias proportion	0.003827	0.053474
MPAE.ISDF	0.279782	Normality	0.150770	Variance proportion	0.055024	0.032442
MPE.ISDF	-0.002593	RESET(2)	0.004384	Covariance proportion	0.941149	0.914085

Table 3.8: Financial Markets (Continued...)

3.8.5: Average Yield On Government Of Canada Bonds, 3-5 Years
Sample(adjusted): 1971:2 1994:4
RGCB35 = RGCB35C(0)+RGCB35C(1)*((USRGB5(-1)+USRGB3(-1))/2)+RGCB35C(2)*RFCP90
+RGCB35C(3)*USRFCP90+RGCB35C(4)*((USRGB5+USRGB3)/2)+RGCB35C(5)*RGCB35(-1)

Coefficient	Value	Standard error	t-statistic	p-value
RGCB35C(0)	0.310157	0.149869	2.069518	0.0414
RGCB35C(1)	-0.663971	0.068342	-9.715438	0.0000
RGCB35C(2)	0.299217	0.034076	8.780838	0.0000
RGCB35C(3)	-0.227810	0.036725	-6.203087	0.0000
RGCB35C(4)	1.030718	0.064054	16.09147	0.0000
RGCB35C(5)	0.533690	0.054268	9.834406	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.981062	LM(1)	0.423746	Mean error	-0.165552	-0.159934
SER	0.342752	LM(4)	0.006187	Mean abs. error	0.261612	0.273756
SDDV	2.490618	ARCH(2)	0.142238	Theil inequality coef.	0.020604	0.021007
MPAE.FIT	0.212388	WHITE	0.347738	Bias proportion	0.222052	0.199201
MPAE.ISDF	0.276217	Normality	0.310754	Variance proportion	0.164618	0.172350
MPE.ISDF	0.005587	RESET(2)	0.254160	Covariance proportion	0.613331	0.628448

3.8.6: Average Yield On Government Of Canada Bonds, 5-10 Years
Sample: 1978:1 1994:4
RGCB510 = RGCB510C(0)+RGCB510C(1)*USRFCP90(-1)+RGCB510C(2)*RFCP90(-1)
+RGCB510C(3)*RFCP90+RGCB510C(4)*USRFCP90+RGCB510C(5)*USRGB5

Coefficient	Value	Standard error	t-statistic	p-value
RGCB510C(0)	1.780725	0.236526	7.528672	0.0000
RGCB510C(1)	-0.194094	0.060383	-3.214361	0.0021
RGCB510C(2)	0.188696	0.054412	3.467935	0.0010
RGCB510C(3)	0.200990	0.058214	3.452630	0.0010
RGCB510C(4)	-0.152064	0.061050	-2.490818	0.0154
RGCB510C(5)	0.832614	0.048624	17.12340	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.973172	LM(1)	0.000002	Mean error	-0.181213	-0.206592
SER	0.355783	LM(4)	0.000075	Mean abs. error	0.286410	0.323690
SDDV	2.172152	ARCH(2)	0.537096	Theil inequality coef.	0.019007	0.022025
MPAE.FIT	0.261942	WHITE	0.003288	Bias proportion	0.293636	0.284812
MPAE.ISDF	0.264931	Normality	0.216260	Variance proportion	0.343097	0.359261
MPE.ISDF	-0.000921	RESET(2)	0.000001	Covariance proportion	0.363268	0.355928

Table 3.8: Financial Markets (Continued...)

3.8.7: Average Yield On Government Of Canada Bonds Over 10 Years

Sample: 1968:1 1994:4

RGCB10 = RGCB10C(0)+RGCB10C(1)*USRGB10(-1)+RGCB10C(2)*RFCP90 +RGCB10C(3) *USRFCP90+RGCB10C(4)*USRGB10+RGCB10C(5)*RGCB10(-1)

Coefficient	Value	Standard error	t-statistic	p-value
RGCB10C(0)	0.677790	0.131857	5.140351	0.0000
RGCB10C(1)	-0.593676	0.063975	-9.279747	0.0000
RGCB10C(2)	0.166070	0.022202	7.480123	0.0000
RGCB10C(3)	-0.125462	0.023426	-5.355566	0.0000
RGCB10C(4)	0.938058	0.050895	18.43128	0.0000
RGCB10C(5)	0.573928	0.057247	10.02549	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.986719	LM(1)	0.309545	Mean error	-0.205802	-0.271769
SER	0.250813	LM(4)	0.141213	Mean abs. error	0.240559	0.302274
SDDV	2.176361	ARCH(2)	0.000019	Theil inequality coef.	0.017343	0.021085
MPAE.FIT	0.187886	WHITE	0.000000	Bias proportion	0.420520	0.499349
MPAE.ISDF	0.246083	Normality	0.018197	Variance proportion	0.247462	0.273029
MPE.ISDF	0.004925	RESET(2)	0.125876	Covariance proportion	0.332019	0.227622

3.8.8: Average Yield On Provincial Bonds

Sample: 1978:1 1994:4

RBOND = RBONDC(0)+RBONDC(1)*RBOND(-1)+RBONDC(2)*RGCB10

Coefficient	Value	Standard error	t-statistic	p-value
RBONDC(0)	0.159579	0.100193	1.592710	0.1161
RBONDC(1)	0.084379	0.022651	3.725213	0.0004
RBONDC(2)	0.960949	0.023742	40.47545	0.0000

Statistics and residual-based Diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.995118	LM(1)	0.000001	Mean error	-0.126464	-0.166413
SER	0.149849	LM(4)	0.000044	Mean abs. error	0.128387	0.166413
SDDV	2.144656	ARCH(2)	0.003125	Theil inequality coef.	0.007504	0.009515
MPAE.FIT	0.111362	WHITE	0.001874	Bias proportion	0.725843	0.784492
MPAE.ISDF	0.117430	Normality	0.034857	Variance proportion	0.005644	0.042752
MPE.ISDF	0.001033	RESET(2)	0.000287	Covariance proportion	0.268513	0.172756

Table 3.8: Financial Markets (Continued...)

3.8.9: Average Yield On Industrial Bonds
Sample: 1980:1 1994:4
RMYWI = RMYWIC(0)+RMYWIC(1)*RMYWI(-1)+RMYWIC(2)*RBOND

Coefficient	Value	Standard error	t-statistic	p-value
RMYWIC(0)	0.155453	0.091169	1.705105	0.0936
RMYWIC(1)	0.046953	0.020574	2.282162	0.0262
RMYWIC(2)	0.957144	0.020508	46.67195	0.0000

Statistics and residual-based Diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.996706	LM(1)	0.000000	Mean error	-0.129546	-0.192521
SER	0.128267	LM(4)	0.000001	Mean abs. error	0.134051	0.192521
SDDV	2.234775	ARCH(2)	0.003895	Theil inequality coef.	0.008399	0.010635
MPAE.FIT	0.101647	WHITE	0.513339	Bias proportion	0.573985	0.795072
MPAE.ISDF	0.106179	Normality	0.589142	Variance proportion	0.009856	0.016197
MPE.ISDF	-0.000751	RESET(2)	0.006344	Covariance proportion	0.416159	0.188731

3.8.10: 5-Year Mortgage Rate
Sample: 1974:1 1994:4
RMC = RMCC(0)+RMCC(1)*RCBP+RMCC(2)*RGCB35+(1-RMCC(1)-RMCC(2))*RMC(-1)

Coefficient	Value	Standard error	t-statistic	p-value
RMCC(0)	1.044485	0.114179	9.147823	0.0000
RMCC(1)	0.161163	0.040559	3.973499	0.0002
RMCC(2)	0.386377	0.054574	7.079887	0.0000

Statistics and residual-based Diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.960192	LM(1)	0.011731	Mean error	0.059936	0.115017
SER	0.495061	LM(4)	0.000042	Mean abs. error	0.437522	0.494026
SDDV	2.481277	ARCH(2)	0.016868	Theil inequality coef.	0.024122	0.028086
MPAE.FIT	0.408270	WHITE	0.000559	Bias proportion	0.013746	0.037125
MPAE.ISDF	0.529381	Normality	0.246732	Variance proportion	0.257246	0.246959
MPE.ISDF	0.004337	RESET(2)	0.001668	Covariance proportion	0.729008	0.715916

3.8.11: Trust Company 5-Year Guaranteed Investment Certificate Rate
Sample: 1976:1 1994:4
RTCGIC = RTCGICC(0)+RTCGICC(1)*RGCB35+(1-RTCGICC(1))*RTCGIC(-1)

Coefficient	Value	Standard error	t-statistic	p-value
RTCGICC(0)	0.161196	0.048464	3.326083	0.0014
RTCGICC(1)	0.584421	0.042153	13.86443	0.0000

Statistics and residual-based Diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.968353	LM(1)	0.250452	Mean error	0.368651	0.497325
SER	0.405425	LM(4)	0.129695	Mean abs. error	0.414053	0.508094
SDDV	2.278993	ARCH(2)	0.000117	Theil inequality coef.	0.027358	0.034522
MPAE.FIT	0.318848	WHITE	0.000040	Bias proportion	0.592792	0.668649
MPAE.ISDF	0.335136	Normality	0.820185	Variance proportion	0.012978	0.032307
MPE.ISDF	0.012099	RESET(2)	0.668214	Covariance proportion	0.394230	0.299045

Table 3.8: Financial Markets (Continued...)

3.8.12: TSE Dividend Yield Ratio
Sample(adjusted): 1974:2 1994:4
D(RDYTSE-USYIELD) = RDYTSEC(1)*D(TT1)

Coefficient	Value	Standard error	t-statistic	p-value
RDYTSEC(1)	0.082562	0.047848	1.725503	0.0882

Statistics and residual-based Diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.035037	LM(1)	0.218898	Mean error	0.094638	0.116068
SER	0.222420	LM(4)	0.006331	Mean abs. error	0.229958	0.282150
SDDV	0.226422	ARCH(2)	0.156501	Theil inequality coef.	0.049766	0.059353
MPAE.FIT	0.147980	WHITE	0.800777	Bias proportion	0.094053	0.098917
MPAE.ISDF	0.417327	Normality	0.643481	Variance proportion	0.254586	0.268657
MPE.ISDF	-0.077413	RESET(2)	0.604287	Covariance proportion	0.651362	0.632426

3.8.13: M1 Monetary Aggregate
Sample: 1970:1 1994:4
LOG(DM1Y) = SWTMON*LOG(CTL_DM1Y)+(1-SWTMON)*(DM1YC(0)
+DM1YC(1)*Q742+DM1YC(2)*Q754+DM1YC(3)*Q784+DM1YC(4)*Q813+DM1YC(5)*Q76M1
+DM1YC(6)*Q81M1+LOG(PGDP) +DM1YC(7)*LOG(YGDP86)+DM1YC(8)*RFCP90(-1)
+DM1YC(9)*D(RFCP90)+DM1YC(11)*LOG(DM1Y(-1)/PGDP(-1)))

Coefficient	Value	Standard error	t-statistic	p-value
DM1YC(0)	-0.026366	0.231556	-0.113866	0.9096
DM1YC(1)	0.024564	0.013290	1.848322	0.0679
DM1YC(2)	0.032635	0.013198	2.472709	0.0153
DM1YC(3)	0.012573	0.013077	0.961476	0.3389
DM1YC(4)	0.026727	0.013757	1.942775	0.0552
DM1YC(5)	-0.001852	0.001230	-1.505426	0.1358
DM1YC(6)	-0.447074	0.094716	-4.720171	0.0000
DM1YC(7)	0.229351	0.046187	4.965736	0.0000
DM1YC(8)	-0.008360	0.000732	-11.42169	0.0000
DM1YC(9)	-0.003389	0.001127	-3.006015	0.0034
DM1YC(11)	0.728951	0.043998	16.56798	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.999375	LM(1)	0.238132	Mean percent error	0.107889	0.473175
SER	0.012584	LM(4)	0.175334	Mean percent abs. error	1.445492	1.454290
SDDV	0.503298	ARCH(2)	0.646819	Theil inequality coef.	0.009171	0.008820
MPAE.FIT	0.910318	WHITE	0.613436	Bias proportion	0.000323	0.039435
MPAE.ISDF	0.906881	Normality	0.605523	Variance proportion	0.441391	0.323131
MPE.ISDF	-0.005510	RESET(2)	0.973310	Covariance proportion	0.558286	0.637434

Table 3.8: Financial Markets (Continued...)

3.8.14: M2 Monetary Aggregate

Sample: 1970:1 1994:4

LOG(DM2Y/PGDP)-LOG(DM2Y(-1)/PGDP(-1)) = DM2YC(0) +DM2YC(1)*LOG(YGDP86) +DM2YC(2)*(RFCP90-RCBNC)+DM2YC(3)*DLOG(CSB/PGDP) +DM2YC(4)*D(((PGDP/PGDP(-1))^ 4-1)*100)+DM2YC(5) *LOG(DM2Y(-1)/PGDP(-1)) +DM2YC(6)*DLOG(DM2Y(-1)/PGDP(-1))+DM2YC(7)*Q81M2

Coefficient	Value	Standard error	t-statistic	p-value
DM2YC(0)	-0.174364	0.104494	-1.668654	0.0986
DM2YC(1)	0.040524	0.015502	2.614170	0.0105
DM2YC(2)	-0.003323	0.001094	-3.035719	0.0031
DM2YC(3)	-0.061778	0.010929	-5.652370	0.0000
DM2YC(4)	-0.001721	0.000243	-7.093656	0.0000
DM2YC(5)	-0.028228	0.010202	-2.766961	0.0068
DM2YC(6)	0.402426	0.076566	5.255944	0.0000
DM2YC(7)	0.053728	0.020887	2.572330	0.0117

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.548666	LM(1)	0.429424	Mean percent error	-0.953052	-6.106011
SER	0.006300	LM(4)	0.057976	Mean percent abs. error	1.066044	6.106011
SDDV	0.009377	ARCH(2)	0.798228	Theil inequality coef.	0.006154	0.037546
MPAE.FIT	0.478330	WHITE	0.335974	Bias proportion	0.600081	0.746183
MPAE.ISDF	2.060367	Normality	0.090051	Variance proportion	0.002483	0.210503
MPE.ISDF	0.299125	RESET(2)	0.266601	Covariance proportion	0.397436	0.043314

3.8.15: Implicit Asset Stock Of Life Insurance Company

Sample: 1973:2 1994:4

LOG(DLICA) = DLICAC(10)+DLICAC(1)*LOG(DM2Y-DM1Y) +DLICAC(2I)*PDL((RYPID-RFCP90),4)+DLICAC(3)*AR(1)

Coefficient	Value	Standard error	t-statistic	p-value
DLICAC(0)	-3.201920	1.070100	-2.992160	0.0036
DLICAC(1)	1.251420	0.088705	14.10760	0.0000
DLICAC(21)	-0.000975	0.002418	-0.403117	0.6878
DLICAC(22)	0.003603	0.001636	2.201880	0.0304
DLICAC(23)	0.008181	0.001640	4.988640	0.0000
DLICAC(24)	0.012760	0.002426	5.260490	0.0000
DLICAC(3)	0.930091	0.025691	36.20300	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	NA	LM(1)	NA	Mean percent error	-7.1516675	-15.01434
SER	0.037352	LM(4)	NA	Mean percent abs. error	NA	NA
SDDV	NA	ARCH(2)	0.042422	Theil inequality coef.	0.0578066	0.142038
MPAE.FIT	NA	WHITE	NA	Bias proportion	0.4890227	0.468330
MPAE.ISDF	NA	Normality	0.615360	Variance proportion	0.0923278	0.363803
MPE.ISDF	NA	RESET(2)	NA	Covariance proportion	0.4186495	0.167866

Table 3.8: Financial Markets (Continued...)

3.8.16: Personal Fixed-Term Deposits

Sample: 1976:3 1994:4

DLOG(DFT/PGDP) = DFTC(0)+DFTC(1)*LOG(YP(-1)/PGDP(-1))+DFTC(2)*LOG(DFT(-1)/PGDP(-1))
+DFTC(3)*RCSB(-1) +DFTC(4)*RFCP90(-1)+DFTC(5)*DLOG(DFT(-4)/PGDP(-4))

Coefficient	Value	Standard error	t-statistic	p-value
DFTC(0)	-0.426534	0.251349	-1.696978	0.0943
DFTC(1)	0.084042	0.034694	2.422349	0.0181
DFTC(2)	-0.053776	0.017853	-3.012180	0.0036
DFTC(3)	-0.005992	0.000805	-7.440223	0.0000
DFTC(4)	0.004553	0.000794	5.737652	0.0000
DFTC(5)	0.155604	0.082861	1.877891	0.0647

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.487362	LM(1)	0.398347	Mean percent error	-1.972804	-11.96806
SER	0.012136	LM(4)	0.518046	Mean percent abs. error	2.443707	11.96806
SDDV	0.016950	ARCH(2)	0.526905	Theil inequality coef.	0.014689	0.081215
MPAE.FIT	0.917160	WHITE	0.801450	Bias proportion	0.429390	0.693364
MPAE.ISDF	2.078253	Normality	0.896713	Variance proportion	0.047841	0.256462
MPE.ISDF	1.137233	RESET(2)	0.724857	Covariance proportion	0.522769	0.050174

3.8.17: Personal Non-Chequable Saving Deposits

Sample: 1976:2 1994:4

DLOG(DNC/PGDP) = DNCC(0)+DNCC(1)*DLOG(DNC(-2)/PGDP(-2))
+DNCC(2)*LOG(YP(-1)/PGDP(-1))+DNCC(3)*RFCP90(-1)+DNCC(4)*RCBNC(-1)
+DNCC(5)*LOG(DNC(-1)/PGDP(-1))+DNCC(6)*DLOG(DNC(-3)/ PGDP(-3))

Coefficient	Value	Standard error	t-statistic	p-value
DNCC(0)	-0.883754	0.413376	-2.137895	0.0361
DNCC(1)	0.172879	0.118053	1.464422	0.1477
DNCC(2)	0.132130	0.042380	3.117741	0.0027
DNCC(3)	-0.015318	0.004833	-3.169544	0.0023
DNCC(4)	0.017766	0.005011	3.545616	0.0007
DNCC(5)	-0.070830	0.026052	-2.718815	0.0083
DNCC(6)	0.344382	0.117624	2.927813	0.0046

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.496641	LM(1)	0.002000	Mean percent error	2.757799	11.78797
SER	0.018778	LM(4)	0.005942	Mean percent abs. error	3.157797	12.14078
SDDV	0.026468	ARCH(2)	0.892904	Theil inequality coef.	0.019202	0.061955
MPAE.FIT	1.446827	WHITE	0.198544	Bias proportion	0.417634	0.698230
MPAE.ISDF	5.394304	Normality	0.018765	Variance proportion	0.141873	0.175513
MPE.ISDF	-1.020890	RESET(2)	0.321808	Covariance proportion	0.440493	0.126257

Table 3.9: Federal Personal Income Tax

3.9.1: Total Number Of Taxable Filers

Sample: 1981 1993

TNFILE = TNFILEC(0)+TNFILEC(1)*(TPROPLFE*LFE/1000)
+TNFILEC(2)*(TPROP65*POP65UP/1000-TAXF65EM/1000)

Coefficient	Value	Standard error	t-statistic	p-value
TNFILEC(0)	0.490405	0.397631	1.233318	0.2457
TNFILEC(1)	1.008106	0.052324	19.26675	0.0000
TNFILEC(2)	1.461451	0.141317	10.34167	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.998134	LM(1)	0.124319	Mean percent error	0.727728	1.601402
SER	0.062154	LM(4)	0.062405	Mean percent abs. error	0.727728	1.601402
SDDV	1.439020	ARCH(2)	0.449437	Theil inequality coef.	0.004233	0.008685
MPAE.FIT	0.343222	WHITE	0.222704	Bias proportion	0.734886	0.833131
MPAE.ISDF	0.295683	Normality	0.513595	Variance proportion	0.065485	0.002146
MPE.ISDF	-0.073785	RESET(2)	0.314240	Covariance proportion	0.199629	0.164723

3.9.2: Total Employment Earnings

Sample: 1976 1993

TPYEMP = TPYEMPC(0)+TPYEMPC(1)*(YPWSSL-TUIRF*1.4/2.4-
TCCPQP/2+YPMP-RESSLI)

Coefficient	Value	Standard error	t-statistic	p-value
TPYEMPC(0)	-3793.454	919.2058	-4.126882	0.0008
TPYEMPC(1)	0.954509	0.003788	251.9707	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.999732	LM(1)	0.502523	Mean percent error	0.017720	0.169815
SER	1319.259	LM(4)	0.306517	Mean percent abs. error	0.625074	0.505968
SDDV	80632.55	ARCH(2)	0.401628	Theil inequality coef.	0.003604	0.003273
MPAE.FIT	0.425128	WHITE	0.160829	Bias proportion	0.000054	0.059253
MPAE.ISDF	0.363629	Normality	0.621655	Variance proportion	0.650400	0.517740
MPE.ISDF	0.069265	RESET(2)	0.426927	Covariance proportion	0.349547	0.423007

3.9.3: Unemployment Insurance Benefits

Sample: 1979 1993

TPYUIB = TPYUIBC(0)+TPYUIBC(1)*TPROPLFE*GTPUIBF

Coefficient	Value	Standard error	t-statistic	p-value
TPYUIBC(0)	-278.6963	129.2227	-2.156713	0.0503
TPYUIBC(1)	1.030032	0.013314	77.36697	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.997666	LM(1)	0.737557	Mean percent error	-0.732329	-0.511184
SER	195.4561	LM(4)	0.078277	Mean percent abs. error	2.062312	1.698725
SDDV	4045.869	ARCH(2)	0.192619	Theil inequality coef.	0.011717	0.009940
MPAE.FIT	1.806758	WHITE	0.077156	Bias proportion	0.113238	0.072777
MPAE.ISDF	1.785456	Normality	0.961996	Variance proportion	0.034365	0.010172
MPE.ISDF	-0.226739	RESET(2)	0.738138	Covariance proportion	0.852398	0.917051

Table 3.9: Federal Personal Income Tax (Continued...)

3.9.4: Old Age Pension Benefits
Sample: 1973 1993
TPYOAP = TPYOAPC(0)+TPYOAPC(1)*(TPROP65*RGTPOAS*GTPOAF)

Coefficient	Value	Standard error	t-statistic	p-value
TPYOAPC(0)	-52.61104	11.42401	-4.605306	0.0002
TPYOAPC(1)	0.991210	0.002909	340.7851	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.999828	LM(1)	0.058525	Mean percent error	-0.768440	-1.253601
SER	31.65280	LM(4)	0.369050	Mean percent abs. error	0.819511	1.253601
SDDV	2412.199	ARCH(2)	0.876080	Theil inequality coef.	0.005428	0.007074
MPAE.FIT	1.199359	WHITE	0.133503	Bias proportion	0.496514	0.810276
MPAE.ISDF	1.065245	Normality	0.075935	Variance proportion	0.008600	0.032542
MPE.ISDF	-0.378878	RESET(2)	0.000462	Covariance proportion	0.494886	0.157181

3.9.5: CPP/QPP Benefits
Sample: 1978 1993
TPYCQP = TPYCQPC(0)+TPYCQPC(1)*(TPROP65*(GBTCPP+GBTQPP))

Coefficient	Value	Standard error	t-statistic	p-value
TPYCQPC(0)	393.9423	75.61674	5.209723	0.0001
TPYCQPC(1)	1.332139	0.015882	83.87542	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.997872	LM(1)	0.006748	Mean percent error	3.477337	6.087602
SER	186.6936	LM(4)	0.056923	Mean percent abs. error	3.477337	6.087602
SDDV	4047.159	ARCH(2)	0.760432	Theil inequality coef.	0.017968	0.030701
MPAE.FIT	5.641544	WHITE	0.289924	Bias proportion	0.838654	0.934567
MPAE.ISDF	4.128450	Normality	0.623833	Variance proportion	0.034213	0.039975
MPE.ISDF	1.373069	RESET(2)	0.000002	Covariance proportion	0.127134	0.025458

3.9.6: Net Non-Farm Business Income
Sample: 1978 1993
TPYBUS = TPYBUSC(0)+TPYBUSC(1)*(YUB-YUBRENT)+TPYBUSC(2)*Q8182ALL

Coefficient	Value	Standard error	t-statistic	p-value
TPYBUSC(0)	-1117.215	347.8861	-3.211439	0.0068
TPYBUSC(1)	0.861503	0.018669	46.14715	0.0000
TPYBUSC(2)	-162.3695	326.1921	-0.497773	0.6270

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.994026	LM(1)	0.083321	Mean percent error	0.795922	-0.113453
SER	400.0612	LM(4)	0.093268	Mean percent abs. error	3.358813	2.472439
SDDV	5175.980	ARCH(2)	0.812297	Theil inequality coef.	0.018821	0.016449
MPAE.FIT	1.603794	WHITE	0.215122	Bias proportion	0.052531	0.000149
MPAE.ISDF	1.578133	Normality	0.056162	Variance proportion	0.650537	0.744303
MPE.ISDF	0.155170	RESET(2)	0.002216	Covariance proportion	0.296932	0.255549

Table 3.9: Federal Personal Income Tax (Continued...)

3.9.7: Net Farming And Fishing Income

Sample: 1981 1993

TPYFARM =(DDATE>=1980)*(TPYFARMC(0)+TPYFARMC(1)*YNF+TPYFISH)+(DDATE<1980)*TPYFARM

Coefficient	Value	Standard error	t-statistic	p-value
TPYFARMC(0)	1125.738	113.4315	9.924387	0.0000
TPYFARMC(1)	0.223013	0.035449	6.291060	0.0001

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.840227	LM(1)	0.763966	Mean percent error	1.423383	-0.480348
SER	121.9028	LM(4)	0.720711	Mean percent abs. error	7.366379	7.260780
SDDV	304.9732	ARCH(2)	0.767228	Theil inequality coef.	0.037195	0.036544
MPAE.FIT	3.914607	WHITE	0.913678	Bias proportion	0.040306	0.001570
MPAE.ISDF	4.187044	Normality	0.575725	Variance proportion	0.318394	0.470985
MPE.ISDF	0.271028	RESET(2)	0.109112	Covariance proportion	0.641299	0.527445

3.9.8: Investment Income

Sample: 1972 1993

TPYINV = TPYINVC(0)+TPYINVC(1)*(YPII-YPLIC)+TPYINVC(2)*Q8182ALL

Coefficient	Value	Standard error	t-statistic	p-value
TPYINVC(0)	947.7106	643.8498	1.471944	0.1574
TPYINVC(1)	0.498022	0.020359	24.46167	0.0000
TPYINVC(2)	3351.339	1172.716	2.857758	0.0101

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.966580	LM(1)	0.155867	Mean percent error	10.04720	9.800222
SER	1581.015	LM(4)	0.029892	Mean percent abs. error	13.40807	13.18675
SDDV	8648.305	ARCH(2)	0.000973	Theil inequality coef.	0.063465	0.062640
MPAE.FIT	7.132188	WHITE	0.253913	Bias proportion	0.267408	0.255476
MPAE.ISDF	6.574467	Normality	0.003048	Variance proportion	0.603207	0.623368
MPE.ISDF	0.987803	RESET(2)	0.049416	Covariance proportion	0.129385	0.121155

3.9.9: Registered Pension Plan Contribution

Sample: 1981 1993

TPDRPP = TPDRPPC(0)+TPDRPPC(1)*YPD+TPDRPB92

Coefficient	Value	Standard error	t-statistic	p-value
TPDRPPC(0)	389.2518	323.0728	1.204842	0.2535
TPDRPPC(1)	0.012480	0.000852	14.65450	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.946845	LM(1)	0.003630	Mean percent error	-7.424040	-11.02762
SER	258.6370	LM(4)	0.020407	Mean percent abs. error	7.424040	11.02762
SDDV	1121.807	ARCH(2)	0.330050	Theil inequality coef.	0.039479	0.063003
MPAE.FIT	3.820102	WHITE	0.126936	Bias proportion	0.961893	0.889001
MPAE.ISDF	4.005740	Normality	0.755649	Variance proportion	0.018486	0.109321
MPE.ISDF	0.220319	RESET(2)	0.000000	Covariance proportion	0.019622	0.001678

Table 3.9: Federal Personal Income Tax (Continued...)

3.9.10: RRSP Contributions

Sample: 1977 1993

TPDRRSP = TPDRRSPC(0)+TPDRRSPC(1)*(TPYEMP+TPYBUS+TPYFARM)
+TPDRRSPC(2)*(DDATE>=1991.1)*((TPDRRSPS-2.75*TPDRPP(-1)*1000/LFE)/(TRDRRSPS
*(TPYEMP(-1)+TPYBUS(-1)+TPYFARM(-1))*1000/LFE-2.75*TPDRPP(-1)*1000/LFE))
+TPDRRSPC(2)*(DDATE<1991.1)*((TPDRRSPS/(TRDRRSPS*(TPYEMP+TPYBUS+TPYFARM)
*1000/LFE)))+TPDRRSPC(3)*Q8182ALL+TPDRRSPC(4)*Q90ALL

Coefficient	Value	Standard error	t-statistic	p-value
TPDRRSPC(0)	-7730.643	555.7411	-13.91051	0.0000
TPDRRSPC(1)	0.050962	0.001708	29.84239	0.0000
TPDRRSPC(2)	1750.906	226.8958	7.716787	0.0000
TPDRRSPC(3)	-505.3591	398.9405	-1.266753	0.2293
TPDRRSPC(4)	-1299.078	576.6223	-2.252909	0.0438

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.987676	LM(1)	0.019060	Mean percent error	NA	NA
SER	506.5419	LM(4)	0.009797	Mean percent abs. error	NA	NA
SDDV	4562.882	ARCH(2)	0.003086	Theil inequality coef.	NA	NA
MPAE.FIT	NA	WHITE	0.012729	Bias proportion	NA	NA
MPAE.ISDF	NA	Normality	0.043499	Variance proportion	NA	NA
MPE.ISDF	NA	RESET(2)	0.153552	Covariance proportion	NA	NA

3.9.11: Capital Gain Exemption

Sample: 1985 1993

TPDGAIN = TPDGAINC(0)+TPDGAINC(1)*TPYGAIN+TPDGAB92

Coefficient	Value	Standard error	t-statistic	p-value
TPDGAINC(0)	-209.1495	284.5919	-0.734910	0.4863
TPDGAINC(1)	0.717020	0.034559	20.74799	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.981713	LM(1)	0.424458	Mean percent error	-5.247447	-6.861673
SER	313.4365	LM(4)	0.199118	Mean percent abs. error	5.247447	6.861673
SDDV	2317.839	ARCH(2)	0.741409	Theil inequality coef.	0.027608	0.037965
MPAE.FIT	4.272817	WHITE	0.477210	Bias proportion	0.878241	0.861305
MPAE.ISDF	3.208178	Normality	0.098274	Variance proportion	0.048774	0.122516
MPE.ISDF	-0.589231	RESET(2)	0.019177	Covariance proportion	0.072986	0.016179

3.9.12: Dividend Tax Credit

Sample: 1972 1993

TTCDIV = TTCDIVC(0)+TTCDIVC(1)*(TPYDIV*TRDIVTC)+TTCDIVC(2)*Q83ALL

Coefficient	Value	Standard error	t-statistic	p-value
TTCDIVC(0)	-1.151426	3.997650	-0.288026	0.7764
TTCDIVC(1)	0.991259	0.003709	267.2777	0.0000
TTCDIVC(2)	-283.8084	9.464975	-29.98512	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.999714	LM(1)	0.707903	Mean percent error	-0.735717	-0.776128
SER	8.886808	LM(4)	0.864332	Mean percent abs. error	0.790086	0.830497
SDDV	525.9120	ARCH(2)	0.060070	Theil inequality coef.	0.004444	0.004656
MPAE.FIT	0.821372	WHITE	0.257625	Bias proportion	0.688271	0.695684
MPAE.ISDF	0.850628	Normality	0.279910	Variance proportion	0.000160	0.002786
MPE.ISDF	0.058008	RESET(2)	0.770242	Covariance proportion	0.311569	0.301530

Table 3.9: Federal Personal Income Tax (Continued...)

3.9.13: Quebec Abatement For PIT
Sample: 1972 1993
TPABATQ = TPABATQC(0)+TPABATQC(1)*(TRABATQ*TPYBF)

Coefficient	Value	Standard error	t-statistic	p-value
TPABATQC(0)	101.3134	15.02075	6.744893	0.0000
TPABATQC(1)	0.204474	0.002487	82.22885	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.996903	LM(1)	0.218242	Mean percent error	-1.630262	-2.160649
SER	29.07069	LM(4)	0.164902	Mean percent abs. error	1.630262	2.160649
SDDV	522.4097	ARCH(2)	0.337886	Theil inequality coef.	0.008733	0.011717
MPAE.FIT	2.111525	WHITE	0.566787	Bias proportion	0.890503	0.876606
MPAE.ISDF	1.894439	Normality	0.722528	Variance proportion	0.021695	0.072478
MPE.ISDF	-0.125862	RESET(2)	0.004483	Covariance proportion	0.087802	0.050915

3.9.14: Federal Personal Income Tax Revenue On A National Accounts Basis
Sample: 1975 1993
TPYF+TPYAFP+TTCFA(-1)+TTCSALE(-1)+TTCCHD(-1)-TPCLBACK(-1) =
TPYFC(10)+TPYFC(1)*(11/12*TPYNPF+1/12*TPYNPF(-1))

Coefficient	Value	Standard error	t-statistic	p-value
TPYFC(0)	-1184.376	367.2770	-3.224750	0.0050
TPYFC(1)	1.067527	0.009780	109.1530	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.998491	LM(1)	0.377006	Mean percent error	-1.318636	-2.125316
SER	700.1195	LM(4)	0.519988	Mean percent abs. error	1.340132	2.125316
SDDV	18025.24	ARCH(2)	0.875726	Theil inequality coef.	0.008166	0.011158
MPAE.FIT	1.324037	WHITE	0.399355	Bias proportion	0.660318	0.928416
MPAE.ISDF	1.321460	Normality	0.000007	Variance proportion	0.068959	0.001174
MPE.ISDF	-0.000668	RESET(2)	0.244691	Covariance proportion	0.270723	0.070410

3.9.15: PIT Miscellaneous Deductions
Sample: 1976 1993
TPDMIS = TPDMISC(0)+TPDMISC(1)*TPYAS+TPDMISC(2)*Q82ALL

Coefficient	Value	Standard error	t-statistic	p-value
TPDMISC(0)	-374.3721	78.70076	-4.756906	0.0003
TPDMISC(1)	0.012215	0.000249	48.98887	0.0000
TPDMISC(2)	-362.0850	125.7030	-2.880481	0.0114

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.993152	LM(1)	0.017904	Mean percent error	-2.538759	-2.980034
SER	121.4476	LM(4)	0.107197	Mean percent abs. error	2.538759	2.980034
SDDV	1467.580	ARCH(2)	0.822924	Theil inequality coef.	0.016337	0.019580
MPAE.FIT	3.961134	WHITE	0.585260	Bias proportion	0.658598	0.637081
MPAE.ISDF	3.423755	Normality	0.700976	Variance proportion	0.328896	0.354891
MPE.ISDF	0.239679	RESET(2)	0.000109	Covariance proportion	0.012506	0.008028

Table 3.10: Federal Corporate Tax*,**

3.10.1 Corporation Current-Year Losses

Sample: 1978 1993

LOG(TYCCYL)-LOG(TYCCYL(-1)) = TYCCYLC(1)*DLOG(YBPROFDP) +TYCCYLC(2)*LOG(TYCCYL(-1))+TYCCYLC(3)*LOG(YGDP(-1))+TYCCYLC(4)*QTYCCYL

Coefficient	Value	Standard error	t-statistic	p-value
TYCCYLC(1)	-0.639098	0.142273	-4.492061	0.0007
TYCCYLC(2)	-0.391438	0.070264	-5.571007	0.0001
TYCCYLC(3)	0.298058	0.051163	5.825699	0.0001
TYCCYLC(4)	-0.336957	0.116675	-2.887983	0.0136

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 – 1993	1-year	4-year
Adj. R2	0.745326	LM(1)	0.066794	Mean percent error	-4.938184	-9.719630
SER	0.111184	LM(4)	0.095218	Mean percent abs. error	4.938184	9.719630
SDDV	0.220318	ARCH(2)	0.494804	Theil inequality coef.	0.043661	0.064449
MPAE.FIT	7.157633	WHITE	0.464398	Bias proportion	0.387344	0.663159
MPAE.ISDF	7.736550	Normality	0.331459	Variance proportion	0.110006	0.014443
MPE.ISDF	0.847758	RESET(2)	0.196118	Covariance proportion	0.502649	0.322398

3.10.2: Rate At Which Current-Year Losses Are Carried Back

Sample: 1984 1993

LOG(TCUSELCB/(1-TCUSELCB)) = TCUSELCBC(0)+TCUSELCBC(1)*TCRPROF+TCUSELCBC(2)*Q84

Coefficient	Value	Standard error	t-statistic	p-value
TCUSELCBC(0)	-0.623630	0.223704	-2.787753	0.0270
TCUSELCBC(1)	-1.114222	0.219466	-5.076971	0.0014
TCUSELCBC(2)	0.410523	0.139814	2.936218	0.0218

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 – 1993	1-year	4-year
Adj. R2	0.735000	LM(1)	0.441603	Mean error	-1.674930	-1.583702
SER	0.122697	LM(4)	0.251046	Mean abs. Error	1.674930	1.583702
SDDV	0.238347	ARCH(2)	0.543259	Theil inequality coef.	0.997277	0.996316
MPAE.FIT	1.879494	WHITE	0.431642	Bias proportion	0.987565	0.981344
MPAE.ISDF	1.891947	Normality	0.673900	Variance proportion	0.011765	0.018005
MPE.ISDF	-1.891947	RESET(2)	0.368581	Covariance proportion	0.000671	0.000652

* Annual data are used for regressions in this sector.

** Four-year out-of-sample dynamic forecast is performed instead of 5-year.

Table 3.10: Federal Corporate Tax (Continued...)

3.10.3: Rate At Which Prior-Year Losses Are Applied
Sample: 1984 1993
LOG(TCUSEPYL/(1-TCUSEPYL)) = TCUSEPYLC(0)+TCUSEPYLC(1)*(LOG(YBPROFDP) -LOG(YBPROFDP(-1)))+TCUSEPYLC(2)*Q84+TCUSEPYLC(3)*TCLSSRAT

Coefficient	Value	Standard error	t-statistic	p-value
TCUSEPYLC(0)	-0.967780	0.146751	-6.594720	0.0006
TCUSEPYLC(1)	0.831659	0.337568	2.463678	0.0489
TCUSEPYLC(2)	-0.447402	0.202825	-2.205851	0.0695
TCUSEPYLC(3)	-0.791247	0.183381	-4.314771	0.0050

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 – 1993	1-year	4-year
Adj. R2	0.698287	LM(1)	0.270705	Mean error	-1.890029	-1.330483
SER	0.174507	LM(4)	0.200665	Mean abs. Error	1.890029	1.330483
SDDV	0.317699	ARCH(2)	0.585084	Theil inequality coef.	0.998390	0.997835
MPAE.FIT	1.743250	WHITE	0.415020	Bias proportion	0.968231	0.964222
MPAE.ISDF	1.734777	Normality	0.954872	Variance proportion	0.028227	0.029885
MPE.ISDF	-1.734777	RESET(2)	0.486973	Covariance proportion	0.003542	0.005894

3.10.4: Undepreciated Capital Cost Of Additions
Sample: 1977 1993
TCUCCCOA = TCUCCCOAC(1)*(IME+INRC)

Coefficient	Value	Standard error	t-statistic	p-value
TCUCCCOAC(1)	0.976248	0.019731	49.47715	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 – 1993	1-year	4-year
Adj. R2	0.934391	LM(1)	0.092952	Mean percent error	-3.601044	-3.542578
SER	4891.134	LM(4)	0.291047	Mean percent abs. error	5.506514	5.507828
SDDV	19095.33	ARCH(2)	0.090209	Theil inequality coef.	0.036918	0.036554
MPAE.FIT	8.667334	WHITE	0.894399	Bias proportion	0.250553	0.246362
MPAE.ISDF	8.115102	Normality	0.394024	Variance proportion	0.283312	0.297609
MPE.ISDF	3.199117	RESET(2)	0.009945	Covariance proportion	0.466135	0.456029

Table 3.10: Federal Corporate Tax (Continued...)

3.10.5: Undepreciated Capital Cost Deductions
Sample: 1977 1993
TCUCCD
=TCUCCDC(0)+TCUCCDC(1)*TYCCG+TCUCCDC(2)*Q81+TCUCCDC(3)*Q89+TCUCCDC(4)*Q90

Coefficient	Value	Standard error	t-statistic	p-value
TCUCCDC(0)	3669.102	688.8571	5.326362	0.0002
TCUCCDC(1)	2.535442	0.157050	16.14414	0.0000
TCUCCDC(2)	6919.636	1373.711	5.037184	0.0003
TCUCCDC(3)	-14723.20	1806.757	-8.148965	0.0000
TCUCCDC(4)	-1091.992	1405.571	-0.776903	0.4523

Statistics and residual-based Diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 – 1993	1-year	4-year
Adj. R2	0.947982	LM(1)	0.362094	Mean percent error	NA	NA
SER	1326.870	LM(4)	0.200468	Mean percent abs. error	NA	NA
SDDV	5817.678	ARCH(2)	0.586207	Theil inequality coef.	NA	NA
MPAE.FIT	6.904641	WHITE	0.264122	Bias proportion	NA	NA
MPAE.ISDF	6.983923	Normality	0.690173	Variance proportion	NA	NA
MPE.ISDF	0.877814	RESET(2)	0.469717	Covariance proportion	NA	NA

3.10.6: Undepreciated Capital Cost Opening Balance
Sample: 1982 1993
TCUCCOB = TCUCCOBC(1)*TCUCCE(-1)

Coefficient	Value	Standard error	t-statistic	p-value
TCUCCOBC(1)	0.977684	0.016405	59.59823	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.953696	LM(1)	0.152953	Mean percent error	2.561375	3.901980
SER	13036.40	LM(4)	0.280766	Mean percent abs. error	2.750039	3.901980
SDDV	60582.55	ARCH(2)	0.294551	Theil inequality coef.	0.018798	0.021516
MPAE.FIT	4.713601	WHITE	0.105816	Bias proportion	0.402323	0.748377
MPAE.ISDF	4.649718	Normality	0.970944	Variance proportion	0.202124	0.067729
MPE.ISDF	-0.001238	RESET(2)	0.662076	Covariance proportion	0.395553	0.183894

3.10.7: Undepreciated Capital Cost Before Claim
Sample: 1984 1993
TCUCCBC = TCUCCOB-TCUCCITC+TCUCCBCC(1)*(TCUCCNA+TCUCCA+TCUCCITC)

Coefficient	Value	Standard error	t-statistic	p-value
TCUCCBCC(1)	0.603145	0.013873	43.47630	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.998417	LM(1)	0.381398	Mean percent error	0.502530	0.561449
SER	2402.421	LM(4)	0.251279	Mean percent abs. error	0.706247	0.726727
SDDV	60379.82	ARCH(2)	0.806620	Theil inequality coef.	0.003897	0.004094
MPAE.FIT	0.562097	WHITE	0.032674	Bias proportion	0.426652	0.483606
MPAE.ISDF	0.624195	Normality	0.457789	Variance proportion	0.107547	0.129737
MPE.ISDF	0.067975	RESET(2)	0.092968	Covariance proportion	0.465801	0.386657

Table 3.10: Federal Corporate Tax (Continued...)

3.10.8: Undepreciated Capital Cost Adjustments

Sample: 1984 1993

TCUCCA = -TCUCCITC+TCUCCAC(0)+TCUCCAC(2)*(YBPROFDP-YBPROFDP(-1))

Coefficient	Value	Standard error	t-statistic	p-value
TCUCCAC(0)	3044.973	269.7962	11.28620	0.0000
TCUCCAC(1)	-0.132036	0.032179	-4.103244	0.0034

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.671289	LM(1)	0.363695	Mean percent error	-7.243613	-9.188400
SER	851.6134	LM(4)	0.113865	Mean percent abs. error	26.80020	24.41145
SDDV	1485.372	ARCH(2)	0.589430	Theil inequality coef.	0.131870	0.129504
MPAE.FIT	51.63254	WHITE	0.394258	Bias proportion	0.213837	0.281328
MPAE.ISDF	57.28582	Normality	0.487408	Variance proportion	0.060690	0.082793
MPE.ISDF	21.76196	RESET(2)	0.747939	Covariance proportion	0.725474	0.635879

3.10.9: Book Depreciation Before Claim

Sample: 1978 1993

TCBDBC = TCBDBCC(1)*TCDNET(-1)+(INRC+IME)+TCBDBCC(2)*Q85

Coefficient	Value	Standard error	t-statistic	p-value
TCBDBCC(1)	0.934000	0.014294	65.34108	0.0000
TCBDBCC(2)	-30990.65	14643.64	-2.116322	0.0527

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.979212	LM(1)	0.316171	Mean percent error	0.433136	-0.176691
SER	14269.84	LM(4)	0.089072	Mean percent abs. error	3.822099	3.672734
SDDV	98973.18	ARCH(2)	0.460242	Theil inequality coef.	0.024062	0.021828
MPAE.FIT	3.821597	WHITE	0.266486	Bias proportion	0.006830	0.002413
MPAE.ISDF	4.021737	Normality	0.630103	Variance proportion	0.208197	0.143885
MPE.ISDF	0.211865	RESET(2)	0.201376	Covariance proportion	0.784973	0.853703

3.10.10 Investment Tax Credit Opening Balance

Sample: 1978 1993

TCITCOB = TCITCOBC(1)*TCITCCVR(-1)

Coefficient	Value	Standard error	t-statistic	p-value
TCITCOBC(1)	0.939973	0.016571	56.72236	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.972137	LM(1)	1.000000	Mean percent error	0.252258	0.355724
SER	187.8016	LM(4)	0.710644	Mean percent abs. error	2.843141	2.689650
SDDV	1125.079	ARCH(2)	0.192484	Theil inequality coef.	0.017106	0.016024
MPAE.FIT	6.336382	WHITE	0.452499	Bias proportion	0.002732	0.008537
MPAE.ISDF	5.594923	Normality	0.301888	Variance proportion	0.002801	0.001011
MPE.ISDF	-1.447870	RESET(2)	0.434749	Covariance proportion	0.994468	0.990453

Table 3.10: Federal Corporate Tax (Continued...)

3.10.11 Non-SR And ED ITC Qualifying Expenditures
Sample: 1977 1993
LOG(TCITCENS) = TCITCENSC(0)+TCITCENSC(1)*LOG(IME+INRC)
+TCITCENSC(2)*QTCITCEN

Coefficient	Value	Standard error	t-statistic	p-value
TCITCENSC(0)	-6.421117	4.091280	-1.569464	0.1389
TCITCENSC(1)	1.469725	0.378642	3.881573	0.0017
TCITCENSC(2)	-2.475474	0.249551	-9.919699	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.870400	LM(1)	0.174545	Mean percent error	103.6952	217.8362
SER	0.357508	LM(4)	0.046448	Mean percent abs. error	128.0597	217.8362
SDDV	0.993078	ARCH(2)	0.147561	Theil inequality coef.	0.453016	0.469973
MPAE.FIT	19.87692	WHITE	0.011036	Bias proportion	0.169376	0.873777
MPAE.ISDF	21.10958	Normality	0.292106	Variance proportion	0.099243	0.014057
MPE.ISDF	5.511771	RESET(2)	0.965466	Covariance proportion	0.731382	0.112166

3.10.12: Cumulative Canadian Development Expenses Opening Balance
Sample: 1978 1993
TCCCDEOB = TCCCDEOBC(1)*TCCCDECB(-1)

Coefficient	Value	Standard error	t-statistic	p-value
TCCCDEOBC(1)	0.911406	0.048937	18.62413	0.0000

Statistics and residual-based Diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.443069	LM(1)	0.102959	Mean percent error	-6.151827	-8.640963
SER	981.8859	LM(4)	0.343510	Mean percent abs. error	11.96964	12.14767
SDDV	1315.710	ARCH(2)	0.757662	Theil inequality coef.	0.082601	0.082641
MPAE.FIT	16.62090	WHITE	0.027889	Bias proportion	0.192249	0.349901
MPAE.ISDF	14.69744	Normality	0.059657	Variance proportion	0.005554	0.016897
MPE.ISDF	-0.037801	RESET(2)	0.031122	Covariance proportion	0.802197	0.633202

3.10.13: Cumulative Canadian Exploration Expenses Opening Balance
Sample: 1978 1993
TCCCEEOB = TCCCEEOBC(1)*TCCCEECB(-1)

Coefficient	Value	Standard error	t-statistic	p-value
TCCCEEOBC(1)	0.955044	0.039291	24.30714	0.0000

Statistics and residual-based Diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.776387	LM(1)	0.171714	Mean percent error	-7.860204	-9.257005
SER	717.1117	LM(4)	0.350147	Mean percent abs. error	7.860204	9.257005
SDDV	1516.484	ARCH(2)	0.674072	Theil inequality coef.	0.041560	0.049334
MPAE.FIT	17.02406	WHITE	0.821135	Bias proportion	0.924041	0.950052
MPAE.ISDF	15.73343	Normality	0.188835	Variance proportion	0.009638	0.001117
MPE.ISDF	1.065919	RESET(2)	0.429698	Covariance proportion	0.066321	0.048831

Table 3.10: Federal Corporate Tax (Continued...)

3.10.14: Capital Gains

Sample: 1978 1993

TYCCG-TYCCG(-1) = TYCCGC(1)*(YGDP-YGDP(-1))+TYCCGC(2)*Q89+TYCCGC(3)*Q90

Coefficient	Value	Standard error	t-statistic	p-value
TYCCGC(1)	0.014397	0.006566	2.192507	0.0471
TYCCGC(2)	4903.418	870.0112	5.636040	0.0001
TYCCGC(3)	-5841.494	827.8450	-7.056265	0.0000

Statistics and residual-based Diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.858195	LM(1)	0.636150	Mean percent error	NA	NA
SER	818.6691	LM(4)	0.107579	Mean percent abs. error	NA	NA
SDDV	2174.019	ARCH(2)	0.808661	Theil inequality coef.	NA	NA
MPAE.FIT	13.450110	WHITE	0.942508	Bias proportion	NA	NA
MPAE.ISDF	15.167235	Normality	0.738312	Variance proportion	NA	NA
MPE.ISDF	4.971949	RESET(2)	0.332297	Covariance proportion	NA	NA

3.10.15: Resource Allowance

Sample: 1981 1993

TYCRA = TYCRAC(0)+TYCRAC(1)*(YOG-OPCOSTOG-YCCAOG)+TYCRAC(2)*QTYCRA

Coefficient	Value	Standard error	t-statistic	p-value
TYCRAC(0)	-192.7888	261.5615	-0.737069	0.4780
TYCRAC(1)	-0.171195	0.013640	-12.55105	0.0000
TYCRAC(2)	623.4558	251.7197	2.476785	0.0327

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.937490	LM(1)	0.601449	Mean percent error	11.55251	14.35935
SER	237.4660	LM(4)	0.185903	Mean percent abs. error	11.55251	14.35935
SDDV	949.7888	ARCH(2)	0.830235	Theil inequality coef.	0.056038	0.066688
MPAE.FIT	5.660987	WHITE	0.393445	Bias proportion	0.792254	0.861426
MPAE.ISDF	5.079641	Normality	0.742934	Variance proportion	0.156473	0.128922
MPE.ISDF	1.648916	RESET(2)	0.816129	Covariance proportion	0.051274	0.009652

3.10.16: Provincial Royalties

Sample: 1977 1993

TYCROY = TYCROYC(1)*TROYP+TYCROYC(2)*QTYCROY

Coefficient	Value	Standard error	t-statistic	p-value
TYCROYC(1)	0.814828	0.017746	45.91666	0.0000
TYCROYC(2)	-965.4959	122.1282	-7.905592	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.951106	LM(1)	0.703015	Mean percent error	-2.897703	-4.292137
SER	284.0620	LM(4)	0.172153	Mean percent abs. error	10.69418	10.21133
SDDV	1284.655	ARCH(2)	0.037729	Theil inequality coef.	0.060080	0.057886
MPAE.FIT	8.011005	WHITE	0.606511	Bias proportion	0.056829	0.138048
MPAE.ISDF	8.217906	Normality	0.485274	Variance proportion	0.835874	0.768450
MPE.ISDF	0.722069	RESET(2)	0.970184	Covariance proportion	0.107297	0.093501

Table 3.10: Federal Corporate Tax (Continued...)

3.10.17: Corporate Taxable Income

Sample: 1981 1993

TYCTAX =

TYCTAXC(0)+TYCTAXC(1)*(YBPROFDP+TYCEXPD+TYCNDEE+TYCDEPL+TYCRA +TYCROY+TCACCDEP+TYCCYL-TYCPYL+TYCCG+TYCINV)+TYCTAXC(2)*Q91+TYCTAXC(3)*Q92

Coefficient	Value	Standard error	t-statistic	p-value
TYCTAXC(0)	870.4040	2378.946	0.365878	0.7229
TYCTAXC(1)	0.750340	0.042438	17.68091	0.0000
TYCTAXC(2)	-4769.915	1887.633	-2.526929	0.0324
TYCTAXC(3)	-9273.067	1901.488	-4.876741	0.0009

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990 - 1993	1-year	4-year
Adj. R2	0.962946	LM(1)	0.367072	Mean percent error	NA	NA
SER	1763.932	LM(4)	0.137699	Mean percent abs. error	NA	NA
SDDV	9163.539	ARCH(2)	0.381321	Theil inequality coef.	NA	NA
MPAE.FIT	2.849927	WHITE	0.590877	Bias proportion	NA	NA
MPAE.ISDF	2.956686	Normality	0.760742	Variance proportion	NA	NA
MPE.ISDF	0.018788	RESET(2)	0.002103	Covariance proportion	NA	NA

Table 3.11: Other Federal Government Revenues And CPP/QPP

3.11.1: Federal Gasoline Tax Revenue

Sample: 1977:1 1994:4

TIGASF = TIGASFC(1)*(0.33*CFUEL*4*(ESGASNC*RGASF1+RGASF2)
+0.67*CFUEL(1)*4*(ESGASNC*RGASF1(-1)+RGASF2(-1))-
(0.33*(REBGASF1*ESGASFAR+REBDIEF1*ESDIEFAR+REBGASF2*ESGASOTH+REBDIEF2*ESDIEOTH)
*CFUEL*4+0.67*(REBGASF1(-1)*ESGASFAR(-1)+REBDIEF1(-1)*ESDIEFAR(-1)
+REBGASF2(-1)*ESGASOTH(-1)+REBDIEF2(-1)*ESDIEOTH(-1))*CFUEL(-1)*4))

Coefficient	Value	Standard error	t-statistic	p-value
TIGASFC(1)	1.019717	0.017761	57.41250	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.947674	LM(1)	0.000100	Mean percent error	3.805788	5.254061
SER	341.8900	LM(4)	0.003144	Mean percent abs. error	15.49826	14.27170
SDDV	1494.615	ARCH(2)	0.000000	Theil inequality coef.	0.084837	0.078948
MPAE.FIT	15.23195	WHITE	0.000020	Bias proportion	0.005552	0.031239
MPAE.ISDF	15.06897	Normality	0.000000	Variance proportion	0.279332	0.465110
MPE.ISDF	3.923274	RESET(2)	0.024424	Covariance proportion	0.715115	0.503651

3.11.2: UI Insurable Labour Income

Sample: 1970:1 1994:4

LOG(WUIC) = WUICC(0)+WUICC(1)*LOG(YLC/LFEC)

Coefficient	Value	Standard error	t-statistic	p-value
WUICC(0)	6.762442	0.013976	483.8750	0.0000
WUICC(1)	0.990486	0.004961	199.6505	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.997522	LM(1)	0.025861	Mean percent error	-1.133419	-1.391628
SER	0.025603	LM(4)	0.000000	Mean percent abs. error	1.236712	1.456369
SDDV	0.514362	ARCH(2)	0.285271	Theil inequality coef.	0.007166	0.008418
MPAE.FIT	1.957503	WHITE	0.000273	Bias proportion	0.638495	0.703485
MPAE.ISDF	1.940329	Normality	0.040409	Variance proportion	0.006539	0.027432
MPE.ISDF	0.069555	RESET(2)	0.000000	Covariance proportion	0.354966	0.269083

3.11.3: Employer/Employee Contributions To The UI Fund

Sample: 1976:2 1994:4

TUIRF = 0.667*UICR*LFE*0.001*EUICOV*2.4*RUIC*UICMAX
(1-TUIRFC(1)(UICMAX/(YPWSSL/(LFE*0.001))))+0.333*UICR(-1)*LFE(-1)*0.001*EUICOV(-1)*2.4
*RUIC(-1)*UICMAX(-1)*(1-TUIRFC(1)*(UICMAX(-1)/(YPWSSL(-1)/(LFE(-1)*0.001))))

Coefficient	Value	Standard error	t-statistic	p-value
TUIRFC(1)	-0.361951	0.002260	-160.1756	0.0000

Statistics and residual-based Diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.993389	LM(1)	0.019426	Mean percent error	-2.797399	-4.462579
SER	458.5279	LM(4)	0.004726	Mean percent abs. error	4.109485	5.213514
SDDV	5639.180	ARCH(2)	0.678560	Theil inequality coef.	0.023785	0.030409
MPAE.FIT	3.498266	WHITE	0.000641	Bias proportion	0.341538	0.578304
MPAE.ISDF	3.518470	Normality	0.008924	Variance proportion	0.000634	0.038034
MPE.ISDF	1.916501	RESET(2)	0.001281	Covariance proportion	0.657829	0.383662

Table 3.11: Other Federal Government Revenues And CPP/QPP (Continued...)

3.11.4: Federal Revenues From The Withholding Tax On Non-Residents

Sample: 1979:1 1994:4

D(TWF) = TWFC(0)+TWFC(1)*TWF(-1)+TWFC(2)*MSD(-1)+TWFC(3)*D(MSD)+TWFC(4)*(D(MSIID)-D(MSD))

Coefficient	Value	Standard error	t-statistic	p-value
TWFC(0)	481.6944	128.8154	3.739415	0.0004
TWFC(1)	-0.721206	0.122824	-5.871846	0.0000
TWFC(2)	0.091457	0.026119	3.501596	0.0009
TWFC(3)	0.116162	0.026680	4.353938	0.0001
TWFC(4)	0.113946	0.043798	2.601594	0.0117

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.540916	LM(1)	0.048713	Mean percent error	-16.09828	-19.13266
SER	272.0529	LM(4)	0.098236	Mean percent abs. error	18.18862	19.83709
SDDV	401.5200	ARCH(2)	0.173789	Theil inequality coef.	0.116043	0.133768
MPAE.FIT	14.92922	WHITE	0.680880	Bias proportion	0.614638	0.690114
MPAE.ISDF	15.21531	Normality	0.000000	Variance proportion	0.004795	0.027372
MPE.ISDF	3.601351	RESET(2)	0.017116	Covariance proportion	0.380567	0.282514

3.11.5: Federal Government Capital Consumption Allowances

Sample: 1970:1 1994:4

TCAGF = TCAGFC(1)*GCFF+(1-TCAGFC(1))*(TCAGF(-1)/PGCF(-1)*PGCF)

Coefficient	Value	Standard error	t-statistic	p-value
TCAGFC(1)	0.014320	0.001669	8.578683	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.999453	LM(1)	1.000000	Mean percent error	0.431565	-0.617773
SER	11.53600	LM(4)	0.864328	Mean percent abs. error	1.444978	1.287794
SDDV	493.3692	ARCH(2)	0.147939	Theil inequality coef.	0.009478	0.007404
MPAE.FIT	0.913639	WHITE	0.091747	Bias proportion	0.051086	0.181667
MPAE.ISDF	5.669078	Normality	0.000000	Variance proportion	0.086770	0.004668
MPE.ISDF	3.817303	RESET(2)	0.033392	Covariance proportion	0.862144	0.813666

Table 3.11: Other Federal Government Revenues And CPP/QPP (Continued...)

3.11.6: Employer/Employee Contributions To The Canada Pension Plan
Sample: 1976:2 1994:4

LOG(TCOCPP) = TCOCPPC(0)+TCOCPPC(1)*LOG(0.66667*LFE*RLFECPP
*(UCPMAX-UCPMIN)*0.001*RCPQP*2+0.33333*LFE(-1)*RLFECPP(-1)
*(UCPMAX(-1)-UCPMIN(-1))*0.001*RCPQP(-1)*2)
+TCOCPPC(2)*LOG(0.66667*UCPMAX*0.001/((YPWSSL+YPMP+YNF+YUB)/LFE)+0.33333
*UCPMAX(-1)*0.001/((YPWSSL(-1)+YPMP(-1)+YNF(-1)+YUB(-1))/LFE(-1)))+TCOCPPC(3)*Q84CPP

Coefficient	Value	Standard error	t-statistic	p-value
TCOCPPC(0)	-0.605907	0.259665	-2.333417	0.0225
TCOCPPC(1)	1.016325	0.027562	36.87477	0.0000
TCOCPPC(2)	-0.757370	0.132589	-5.712173	0.0000
TCOCPPC(3)	-0.624274	0.057301	-10.89468	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.990141	LM(1)	0.104093	Mean percent error	0.567468	-0.329013
SER	0.056726	LM(4)	0.042774	Mean percent abs. error	2.686611	2.399714
SDDV	0.571302	ARCH(2)	0.003409	Theil inequality coef.	0.015762	0.014431
MPAE.FIT	3.958887	WHITE	0.080015	Bias proportion	0.050986	0.005386
MPAE.ISDF	3.913144	Normality	0.000063	Variance proportion	0.425459	0.327090
MPE.ISDF	0.053922	RESET(2)	0.129657	Covariance proportion	0.523555	0.667524

3.11.7: Employer/Employee Contributions To The Quebec Pension Plan
Sample: 1976:2 1994:4

LOG(TCOQPP) = TCOQPPC(0)+TCOQPPC(1)*LOG(0.66667*LFE*(1-RLFECPP)
*(UQPMAX-UQPMIN)*0.001*RCPQP*2+0.33333*LFE(-1)*(1-RLFECPP(-1))*(UQPMAX(-1)-UQPMIN(-1))
*0.001*RCPQP(-1)*2)+TCOQPPC(2)*LOG(0.66667*UQPMAX*0.001/((YPWSSL+YPMP+YNF+YUB)/LFE)
+0.33333*UQPMAX(-1)*0.001/((YPWSSL(-1)+YPMP(-1)+YNF(-1)+YUB(-1))/LFE(-1)))

Coefficient	Value	Standard error	t-statistic	p-value
TCOQPPC(0)	0.062238	0.283164	0.219795	0.8267
TCOQPPC(1)	0.932211	0.034278	27.19539	0.0000
TCOQPPC(2)	-0.443870	0.156604	-2.834347	0.0060

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.983204	LM(1)	0.149568	Mean percent error	2.362509	3.230053
SER	0.067510	LM(4)	0.033285	Mean percent abs. error	3.967584	4.736393
SDDV	0.520910	ARCH(2)	0.026964	Theil inequality coef.	0.024661	0.028061
MPAE.FIT	5.175581	WHITE	0.000891	Bias proportion	0.200012	0.308638
MPAE.ISDF	5.081564	Normality	0.743658	Variance proportion	0.000186	0.034841
MPE.ISDF	0.059049	RESET(2)	0.140056	Covariance proportion	0.799801	0.656521

Table 3.11: Other Federal Government Revenues And CPP/QPP (Continued...)

3.11.8: Canada Pension Plan Investment Income

Sample: 1971:1 1994:4

YIICPP = YIICPPC(0)+YIICPPC(1)*(GCUMBALC*((@MOVSUM(RGCB10/100*GBALCPP,41)+KRGCBC)/(@MOVSUM(GBALCPP,41)+KGBALC)))

Coefficient	Value	Standard error	t-statistic	p-value
YIICPPC(0)	-40.10125	16.80827	-2.385805	0.0190
YIICPPC(1)	0.994492	0.005791	171.7198	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.996789	LM(1)	0.307118	Mean percent error	1.073905	0.799033
SER	89.17122	LM(4)	0.000000	Mean percent abs. error	2.863090	2.814881
SDDV	1573.528	ARCH(2)	0.000000	Theil inequality coef.	0.015935	0.015557
MPAE.FIT	2.415130	WHITE	0.000002	Bias proportion	0.105033	0.059383
MPAE.ISDF	2.370804	Normality	0.000000	Variance proportion	0.015506	0.009579
MPE.ISDF	-0.297967	RESET(2)	0.111779	Covariance proportion	0.879461	0.931039

Table 3.12: PLH Sector

3.12.1: PLH Capital Consumption Allowances

Sample: 1961:2 1994:4

TCAGP = TCAGPC(1)*GCFP+TCAGPC(2)*TCAGP(-1)*PGCF/PGCF(-1)

Coefficient	Value	Standard error	t-statistic	p-value
TCAGPC(1)	0.006725	0.003850	1.746561	0.0830
TCAGPC(2)	0.999299	0.006896	144.9184	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.999763	LM(1)	0.274135	Mean percent error	0.132433	-1.854561
SER	43.71515	LM(4)	0.582951	Mean percent abs. error	1.406060	1.935118
SDDV	2841.274	ARCH(2)	0.104406	Theil inequality coef.	0.009274	0.012522
MPAE.FIT	1.050876	WHITE	0.000051	Bias proportion	0.008715	0.580417
MPAE.ISDF	16.18665	Normality	0.000000	Variance proportion	0.507492	0.091316
MPE.ISDF	16.18665	RESET(2)	0.061740	Covariance proportion	0.483792	0.328267

3.12.2: PLH Transfers To Persons For Direct Relief

Sample: 1978:1 1994:4

LOG(GTPRELP) = GTPRELPC(0)+GTPRELPC(1)*LOG(PCPI(-4))
+GTPRELPC(2)*LOG(LFPOP-LF)+GTPRELPC(3)*LOG(LUIGEN)+GTPRELPC(4)*LOG(LFU(-4))

Coefficient	Value	Standard error	t-statistic	p-value
GTPRELPC(0)	-11.14428	1.940548	-5.742851	0.0000
GTPRELPC(1)	1.573532	0.038447	40.92764	0.0000
GTPRELPC(2)	2.278924	0.240689	9.468321	0.0000
GTPRELPC(3)	-0.014642	0.041117	-0.356097	0.7230
GTPRELPC(4)	-0.006411	0.054458	-0.117724	0.9067

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.992303	LM(1)	0.305194	Mean percent error	-1.004977	-22.98111
SER	0.049011	LM(4)	0.479541	Mean percent abs. error	6.715851	22.98111
SDDV	0.558661	ARCH(2)	0.779132	Theil inequality coef.	0.039103	0.155506
MPAE.FIT	3.445109	WHITE	0.219338	Bias proportion	0.000075	0.798453
MPAE.ISDF	3.481498	Normality	0.000001	Variance proportion	0.587028	0.193628
MPE.ISDF	0.126460	RESET(2)	0.897100	Covariance proportion	0.412896	0.007919

3.12.3: PLH Transfers To Persons For Post-Secondary Education

Sample: 1975:1 1994:4

GTPEDP = GTPEDPC(1)*@MOVAV(LFPRYMT(-1)+LFPRYWT(-1),8)/2+GTPEDPC(2)*@MOVAV(PCPI(-1),4)

Coefficient	Value	Standard error	t-statistic	p-value
GTPEDPC(1)	-4.811784	1.395524	-3.448011	0.0009
GTPEDPC(2)	5249.815	99.93079	52.53451	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.975787	LM(1)	1.000000	Mean percent error	0.570142	-0.174269
SER	238.2576	LM(4)	0.016740	Mean percent abs. error	4.272746	4.120815
SDDV	1531.177	ARCH(2)	0.400199	Theil inequality coef.	0.026548	0.025933
MPAE.FIT	4.312664	WHITE	0.005074	Bias proportion	0.006098	0.004303
MPAE.ISDF	4.269658	Normality	0.623357	Variance proportion	0.002571	0.018088
MPE.ISDF	0.439435	RESET(2)	0.593580	Covariance proportion	0.991331	0.977609

Table 3.12: PLH Sector (Continued...)

3.12.4: Effective Rate For Debt Charges (Excluding CPP)
Sample: 1985:1 1994:4
RGIDXC = RGIDXCC(1)*RGIDXC(-1)+RGIDXCC(2)*RBOND/100

Coefficient	Value	Standard error	t-statistic	p-value
RGIDXCC(1)	0.876052	0.079837	10.97297	0.0000
RGIDXCC(2)	0.115842	0.078998	1.466388	0.1508

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.882185	LM(1)	0.007264	Mean percent error	2.798957	7.263471
SER	0.003421	LM(4)	0.058897	Mean percent abs. error	3.549366	7.263471
SDDV	0.009967	ARCH(2)	0.999345	Theil inequality coef.	0.022500	0.040373
MPAE.FIT	2.625104	WHITE	0.379377	Bias proportion	0.383124	0.744384
MPAE.ISDF	3.952359	Normality	0.709560	Variance proportion	0.092153	0.021005
MPE.ISDF	-0.074048	RESET(2)	0.949605	Covariance proportion	0.524723	0.234611

3.12.5: PLH Indirect Taxes-Property Taxes
Sample: 1961:3 1994:4
DLOG(TIPTP-TIPTP(-4)) = TIPTPC(0)+TIPTPC(1)*DLOG(IRC(-1))+TIPTPC(2)*DLOG(TIPTP(-1)-TIPTP(-5))
+TIPTPC(3)*(LOG(TIPTP(-1)-TIPTP(-5)))+TIPTPC(4)*LOG(IRC(-1))

Coefficient	Value	Standard error	t-statistic	p-value
TIPTPC(0)	-0.409159	0.206980	-1.976800	0.0502
TIPTPC(1)	0.673733	0.397351	1.695564	0.0924
TIPTPC(2)	-0.152659	0.083031	-1.838587	0.0683
TIPTPC(3)	-0.239343	0.063900	-3.745592	0.0003
TIPTPC(4)	0.205383	0.058341	3.520425	0.0006

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.185928	LM(1)	0.262223	Mean percent error	-0.129721	-1.578254
SER	0.212853	LM(4)	0.107578	Mean percent abs. error	1.271520	1.850267
SDDV	0.235911	ARCH(2)	0.710526	Theil inequality coef.	0.007614	0.010139
MPAE.FIT	1.216247	WHITE	0.629256	Bias proportion	0.004013	0.555845
MPAE.ISDF	5.340286	Normality	0.000082	Variance proportion	0.062990	0.144555
MPE.ISDF	-4.523262	RESET(2)	0.108533	Covariance proportion	0.932997	0.299600

3.12.6: PLH Indirect Taxes-Motor Fuel Taxes
Sample: 1973:1 1994:4
TIFUP = TIFUPC(0)+TIFUPC(1)*RTGASAV*TPFUEL*CFUEL*4

Coefficient	Value	Standard error	t-statistic	p-value
TIFUPC(0)	29.87862	36.15630	0.826374	0.4109
TIFUPC(1)	0.957170	0.009801	97.66151	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.990960	LM(1)	0.964090	Mean percent error	-0.908611	-1.050884
SER	147.5880	LM(4)	0.206237	Mean percent abs. error	2.202926	2.294253
SDDV	1552.259	ARCH(2)	0.864001	Theil inequality coef.	0.013732	0.014195
MPAE.FIT	2.791962	WHITE	0.051030	Bias proportion	0.139692	0.179794
MPAE.ISDF	2.770653	Normality	0.000000	Variance proportion	0.101497	0.188243
MPE.ISDF	0.093850	RESET(2)	0.195013	Covariance proportion	0.758812	0.631962

Table 3.12: PLH Sector (Continued...)

3.12.7: Effective Interest Rate For Interest Income

Sample: 1974:1 1994:4

RYGXPFTP = RYGXPFTC(1)*RYGXPFTP(-1)+RYGXPFTC(2)*RFCP90/100+RYGXPFTC(3)*RGCB10/100

Coefficient	Value	Standard error	t-statistic	p-value
RYGXPFTC(1)	0.876079	0.037008	23.67284	0.0000
RYGXPFTC(2)	0.020929	0.028852	0.725390	0.4703
RYGXPFTC(3)	0.086345	0.049882	1.730970	0.0873

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.937290	LM(1)	0.000661	Mean percent error	2.023775	7.324100
SER	0.004503	LM(4)	0.001590	Mean percent abs. error	4.017537	7.324100
SDDV	0.017982	ARCH(2)	0.157240	Theil inequality coef.	0.025342	0.040941
MPAE.FIT	4.017008	WHITE	0.067525	Bias proportion	0.195355	0.766225
MPAE.ISDF	5.469828	Normality	0.182740	Variance proportion	0.454677	0.097096
MPE.ISDF	-0.420716	RESET(2)	0.155474	Covariance proportion	0.349968	0.136679

3.12.8: Provincial Personal Income Tax Collections, Excluding Quebec

Sample: 1981:1 1994:4

LOG(TPYPXQ-TPYAFP) = TPYPXQC(0)+TPYPXQC(1)*LOG(2/3*RTYPXQ *(TPYBF+TPYFAT)+1/3*RTYPXQ(-1)*(TPYBF(-1)+TPYFAT(-1))+TPYADJP+TTCFA)

Coefficient	Value	Standard error	t-statistic	p-value
TPYPXQC(0)	-0.354177	0.254620	-1.391001	0.1699
TPYPXQC(1)	1.038670	0.026138	39.73719	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.966321	LM(1)	0.476427	Mean percent error	-0.998591	-3.646592
SER	0.067368	LM(4)	0.738196	Mean percent abs. error	4.972161	5.576384
SDDV	0.367087	ARCH(2)	0.881449	Theil inequality coef.	0.033498	0.035927
MPAE.FIT	4.963600	WHITE	0.560417	Bias proportion	0.036201	0.308050
MPAE.ISDF	4.999223	Normality	0.008305	Variance proportion	0.020189	0.076484
MPE.ISDF	0.170525	RESET(2)	0.759767	Covariance proportion	0.943610	0.615466

3.12.9: Quebec Personal Income Tax Collections

Sample: 1976:1 1994:4

LOG(TPYPQ) = TPYPQC(0)+TPYPQC(1)*LOG(RTPYQYP*TPYAS)

Coefficient	Value	Standard error	t-statistic	p-value
TPYPQC(0)	-2.696529	0.292906	-9.206132	0.0000
TPYPQC(1)	1.076542	0.027172	39.61942	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.954371	LM(1)	0.407335	Mean percent error	0.321763	-0.790190
SER	0.096176	LM(4)	0.000063	Mean percent abs. error	8.053241	7.964363
SDDV	0.450243	ARCH(2)	0.652792	Theil inequality coef.	0.046613	0.046648
MPAE.FIT	7.715530	WHITE	0.000660	Bias proportion	0.002087	0.027321
MPAE.ISDF	7.567031	Normality	0.190231	Variance proportion	0.121739	0.157731
MPE.ISDF	0.213159	RESET(2)	0.998384	Covariance proportion	0.876174	0.814948

Table 3.12: PLH Sector (Continued...)

3.12.10: PLH Direct Taxes On Corporate And Government Business Enterprises
Sample: 1965:1 1994:4
TCAP = TCAPC(0)+TCAPC(1)*(RTCAP*TYCTAX)

Coefficient	Value	Standard error	t-statistic	p-value
TCAPC(0)	341.0881	56.38049	6.049755	0.0000
TCAPC(1)	0.784476	0.014499	54.10685	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.960927	LM(1)	0.000000	Mean percent error	9.421087	11.46485
SER	340.7479	LM(4)	0.000000	Mean percent abs. error	9.928855	11.81469
SDDV	1723.823	ARCH(2)	0.000000	Theil inequality coef.	0.053479	0.063040
MPAE.FIT	11.95346	WHITE	0.000003	Bias proportion	0.696478	0.728711
MPAE.ISDF	11.73282	Normality	0.102012	Variance proportion	0.043812	0.049930
MPE.ISDF	4.328871	RESET(2)	0.000001	Covariance proportion	0.259710	0.221359

3.12.11: PLH Remitted Profit
Sample: 1962:1 1994:4
YPFTP = YPFTPC(0)+YPFTPC(1)*RBOND/100+YPFTPC(2)*YGDP

Coefficient	Value	Standard error	t-statistic	p-value
YPFTPC(0)	261.4665	130.7296	2.000056	0.0476
YPFTPC(1)	-7762.239	1493.307	-5.198021	0.0000
YPFTPC(2)	0.004246	0.000168	25.32770	0.0000

Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.845561	LM(1)	0.244202	Mean percent error	10.91278	12.33711
SER	394.5952	LM(4)	0.003710	Mean percent abs. error	20.73517	20.28390
SDDV	1004.092	ARCH(2)	0.133455	Theil inequality coef.	0.119836	0.116718
MPAE.FIT	40.28937	WHITE	0.051821	Bias proportion	0.035410	0.072122
MPAE.ISDF	40.44764	Normality	0.000000	Variance proportion	0.498056	0.362183
MPE.ISDF	-8.075372	RESET(2)	0.005920	Covariance proportion	0.466535	0.565695

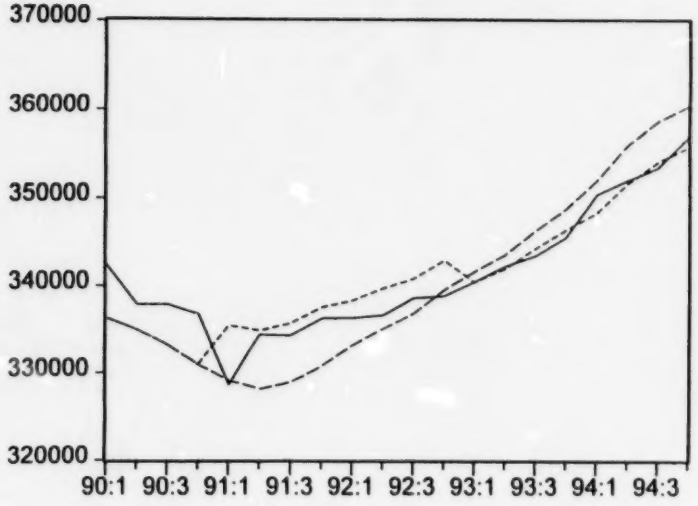
3.12.12: Provincial Payroll Taxes
Sample: 1977:1 1994:4
TPYPRT = TPYPRTC(0)+TPYPRTC(1)*RTPYPRT*YPWSSL

Coefficient	Value	Standard error	t-statistic	p-value
TPYPRTC(0)	1.015299	43.05871	0.023579	0.9813
TPYPRTC(1)	0.880386	0.012088	72.82858	0.0000

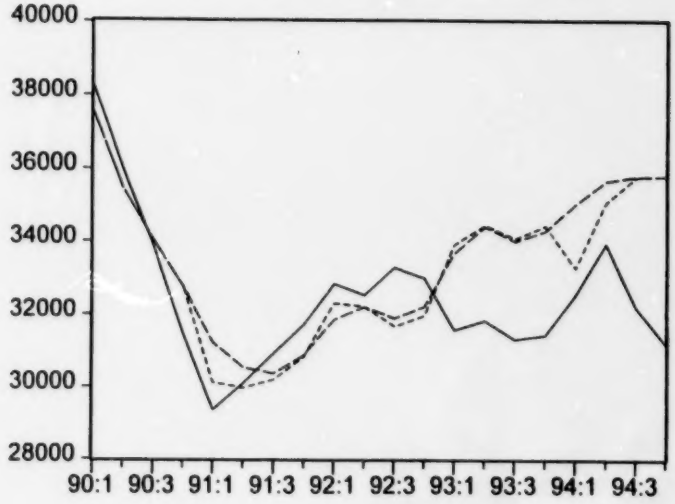
Statistics and residual-based diagnostic-tests (p-value)				Out-of-sample dynamic forecast tests 1990Q1- 1994Q4	1-year	5-year
Adj. R2	0.986788	LM(1)	0.914603	Mean percent error	-0.437971	-3.293579
SER	224.1929	LM(4)	0.025782	Mean percent abs. error	5.756527	5.514824
SDDV	1950.481	ARCH(2)	0.027141	Theil inequality coef.	0.035581	0.038462
MPAE.FIT	9.835877	WHITE	0.000158	Bias proportion	0.011881	0.233320
MPAE.ISDF	9.219461	Normality	0.000000	Variance proportion	0.056281	0.146322
MPE.ISDF	0.965797	RESET(2)	0.309983	Covariance proportion	0.931837	0.620359

CHART 1
DYNAMIC OUT-OF-SAMPLE FORECASTS: HOUSEHOLD SECTOR

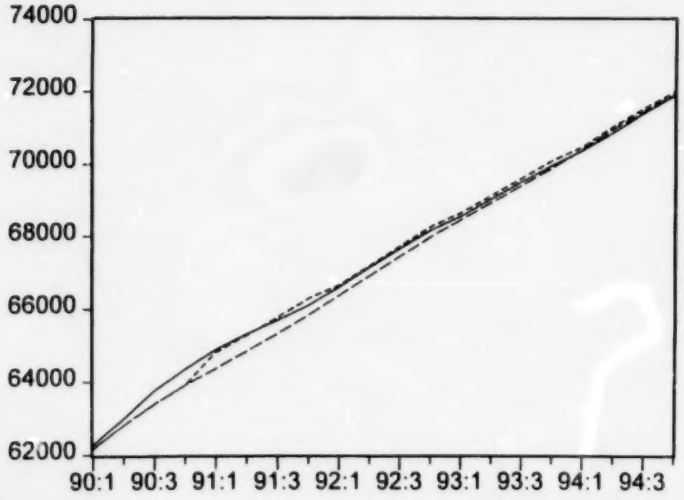
1.1 CONSUMPTION (C86)



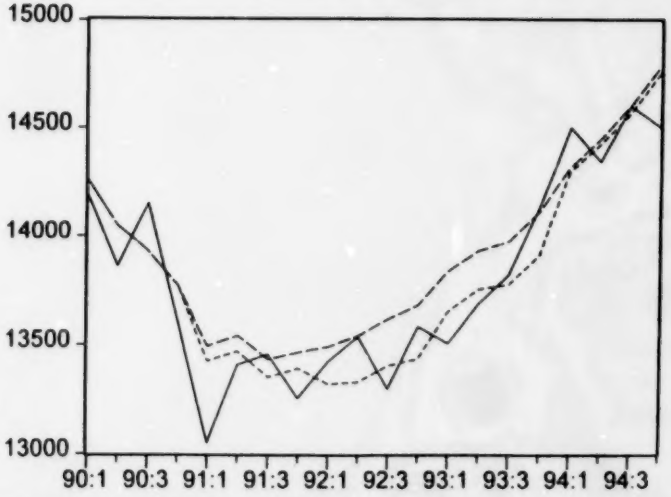
1.2 RESIDENTIAL INVESTMENT (IRC86)



1.3 RENT CONSUMPTION (CRENT86)



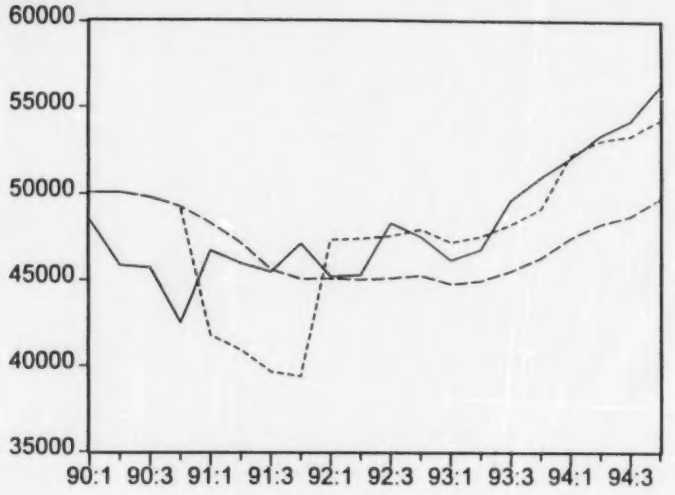
1.4 FUEL CONSUMPTION (CFUEL)



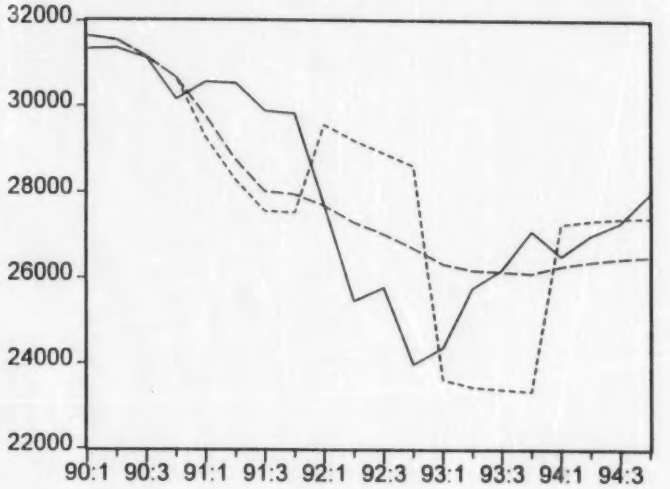
—— ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORCAST

CHART 2
DYNAMIC OUT-OF-SAMPLE FORECASTS: BUSINESS INVESTMENT

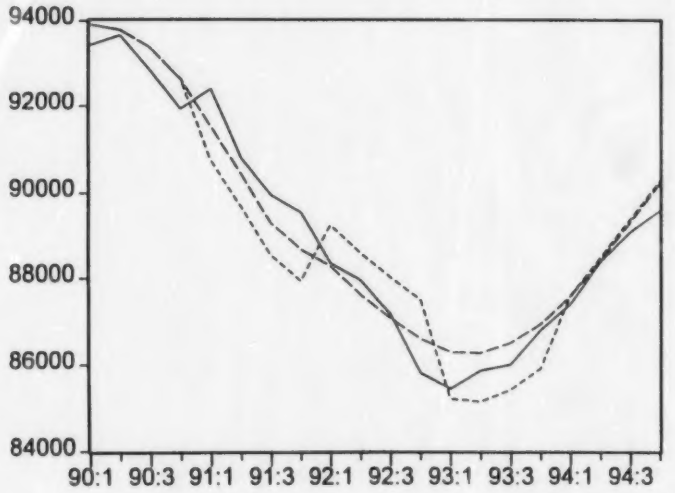
2.1 BUSINESS INVESTMENT IN MACHINARY AND EQUIPMENT (IME86)



2.2 BUSINESS INVESTMENT IN CONSTRUCTION (INRC86)



2.3 BUSINESS NON-FARM INVENTORY STOCK (KINVB)

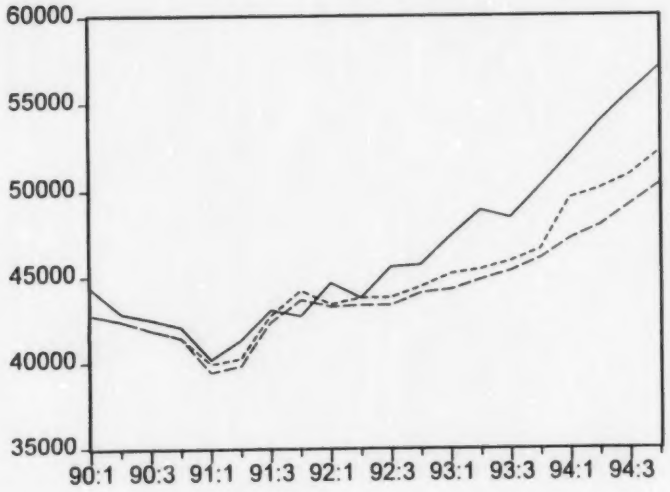


ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

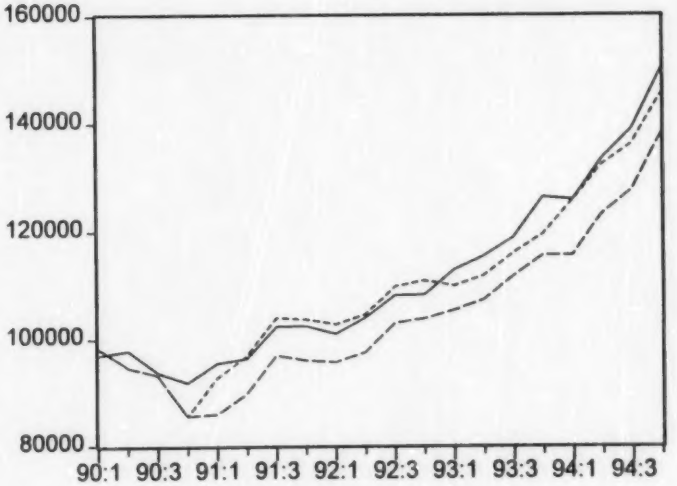
CHART 3

DYNAMIC OUT-OF-SAMPLE FORECASTS: TRADE FLOWS AND BALANCE OF PAYMENTS

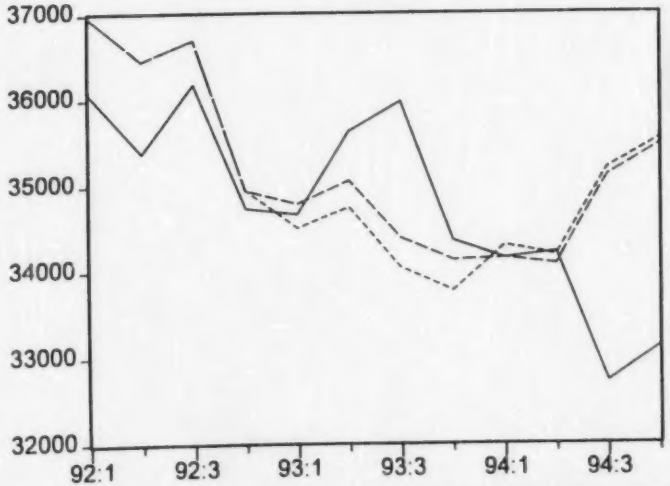
3.1 IMPORTS OF COMMODITIES (MC86)



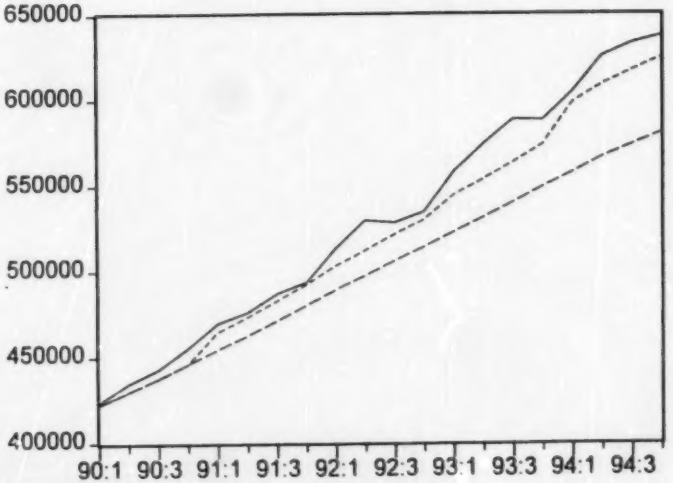
3.2 IMPORTS OF END PRODUCTS (MM86)



3.3 IMPORTS OF SERVICES (MS86)



3.4 STOCK OF DOMESTIC ASSETS HELD BY FOREIGNERS (KIL)



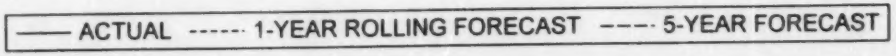
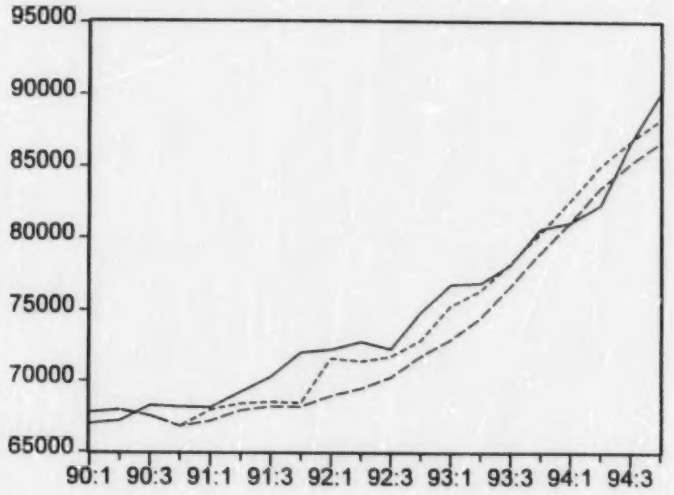


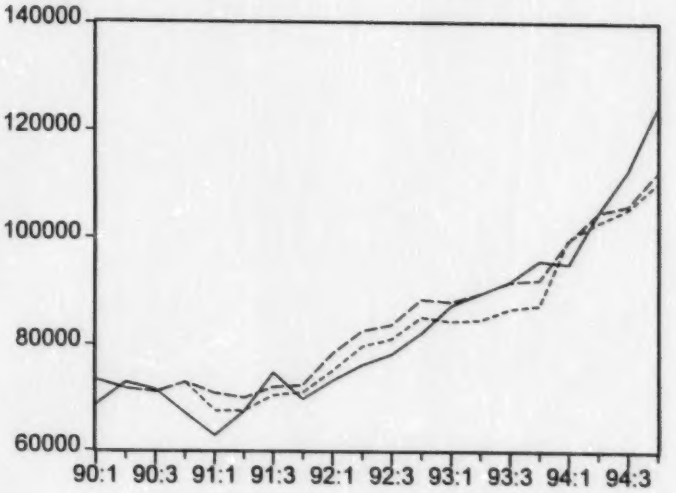
CHART 3

DYNAMIC OUT-OF-SAMPLE FORECASTS: TRADE FLOWS AND BALANCE OF PAYMENTS (CONTINUED...)

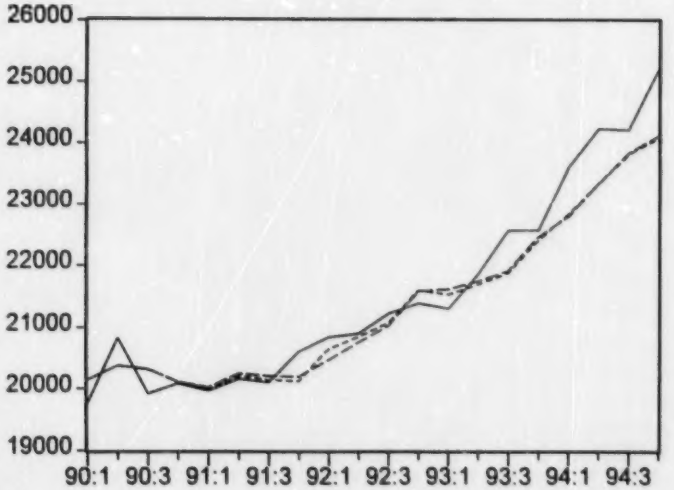
3.5 EXPORTS OF COMMODITIES (XC86)



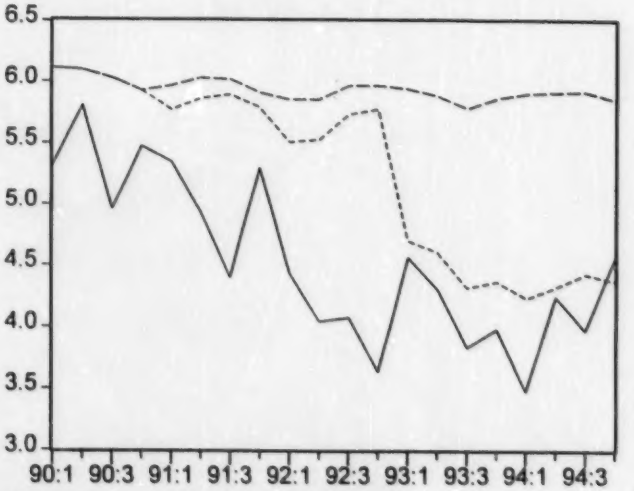
3.6 EXPORTS OF END PRODUCTS (XM86)



3.7 EXPORTS OF SERVICES (XS86)



3.8 IMPLICIT RATE OF RETURN ON FOREIGN ASSETS HELD BY CANADIAN (RXSIID)

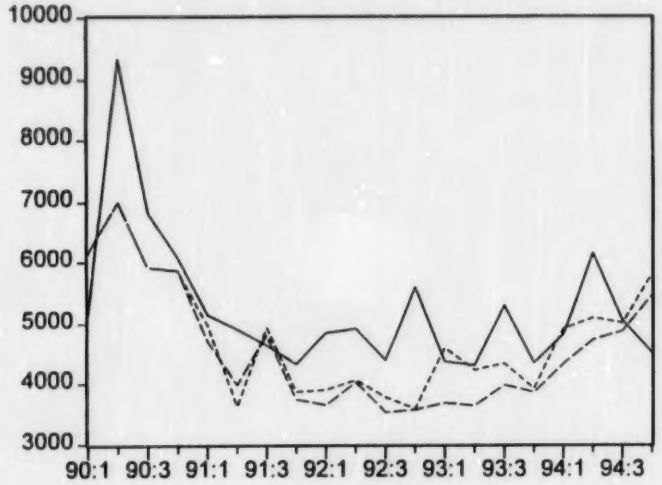


ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

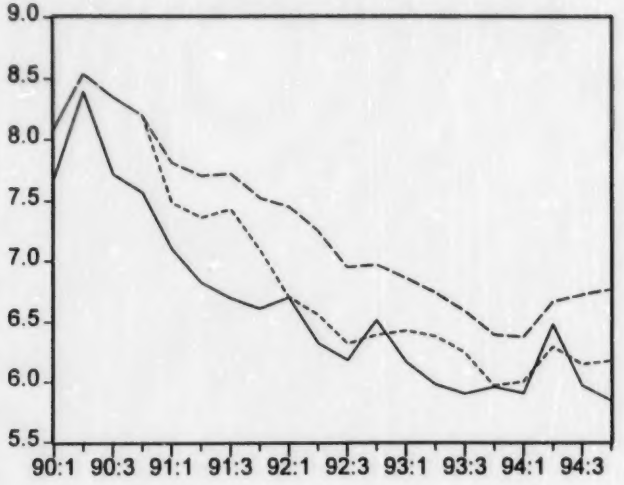
CHART 3

DYNAMIC OUT-OF-SAMPLE FORECASTS: TRADE FLOWS AND BALANCE OF PAYMENTS (CONTINUED...)

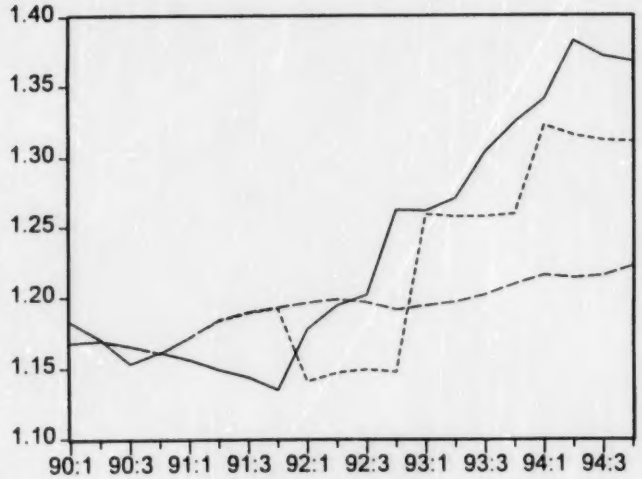
3.9 DIVIDEND PAYMENTS TO NON-RESIDENTS (MSD)



3.10 IMPLICIT RATE OF RETURN ON DOMESTIC ASSETS HELD BY FOREIGNERS (RMSIID)



3.11 EXCHANGE RATE WITH U.S. (PFX)



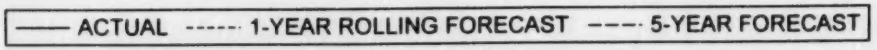
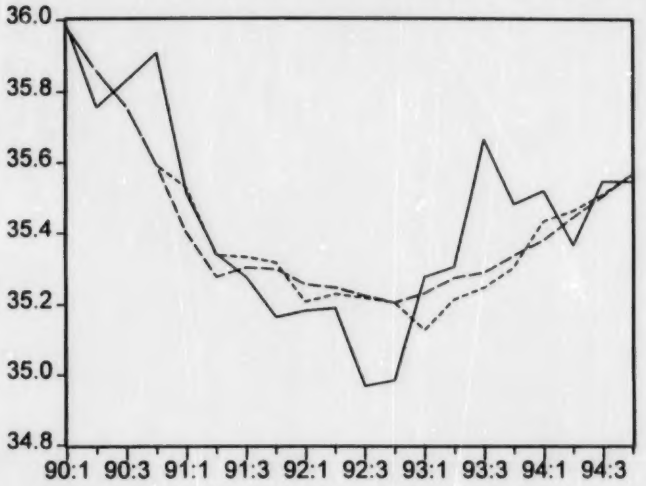
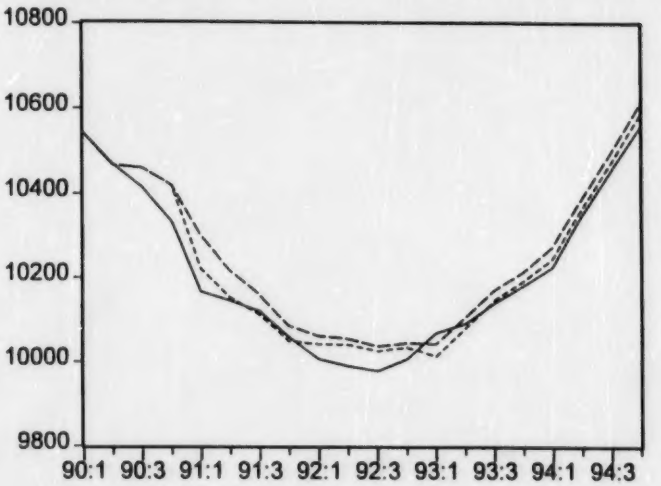


CHART 4
DYNAMIC OUT-OF-SAMPLE FORECASTS: LABOUR MARKET

4.1 AVERAGE WEEKLY HOURS IN THE COMMERCIAL SECTOR (LFAHC)



4.2 EMPLOYMENT IN THE COMMERCIAL SECTOR (LFEC)



4.3 PARTICIPATION RATE (LFPR)

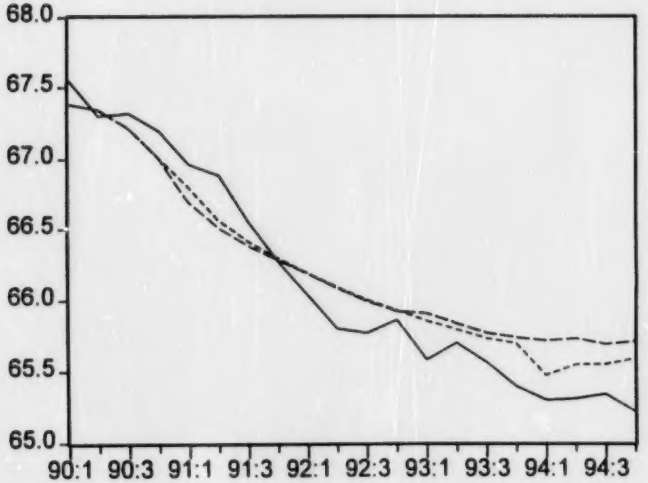
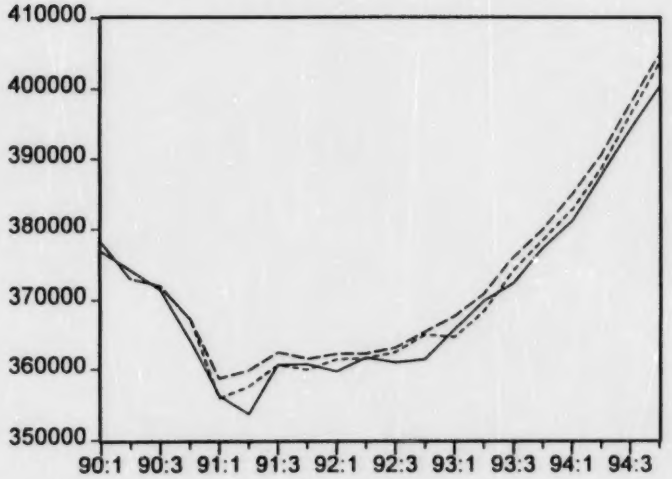
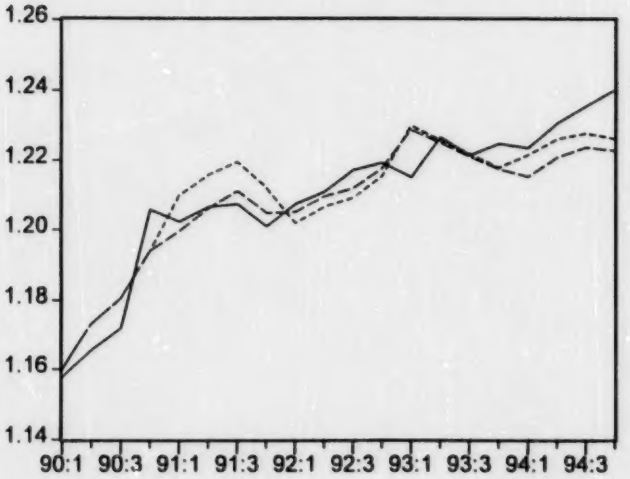


CHART 5
DYNAMIC OUT-OF-SAMPLE FORECASTS: SUPPLY SIDE

5.1 COMMERCIAL REAL GDP (YGDPC86)



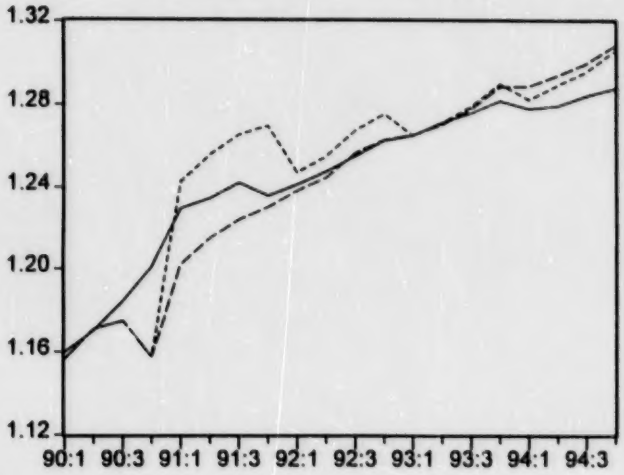
5.2 IMPLICIT PRICE DEFLATOR FOR GDP AT FACTOR COSTS (PGDPFC)



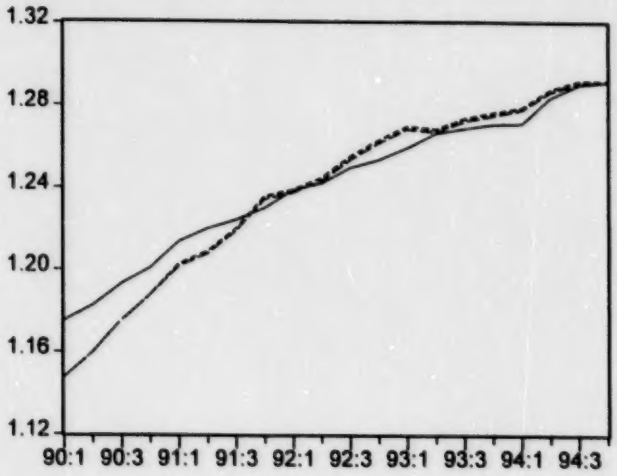
—— ACTUAL ----- 1-YEAR ROLLING FORECAST – – – – 5-YEAR FORECAST

CHART 6
DYNAMIC OUT-OF-SAMPLE FORECAST: TRANSACTION AND FACTOR PRICES

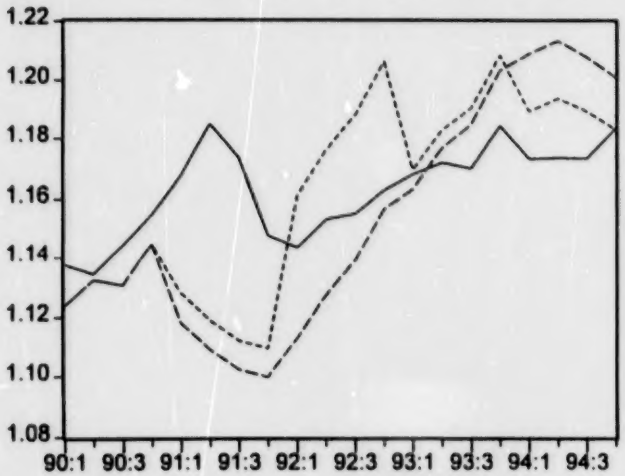
6.1 IMPLICIT PRICE DEFLATOR FOR CONSUMPTION (PC)



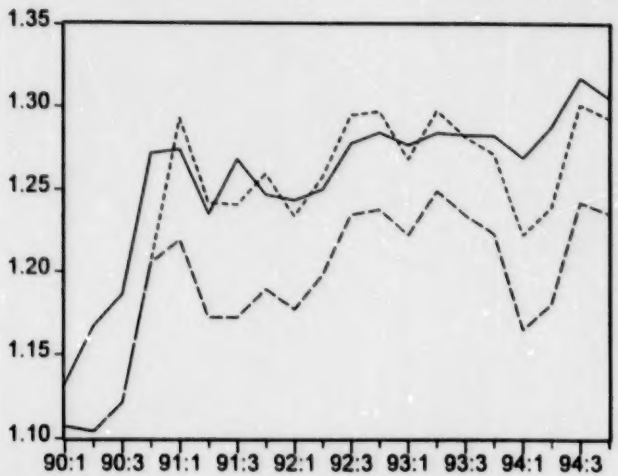
6.2 IMPLICIT PRICE DEFLATOR FOR RENT CONSUMPTION (PCRENT)



6.3 IMPLICIT PRICE DEFLATOR FOR FOOD CONSUMPTION (PCNDF)



6.4 IMPLICT PRICE DEFLATOR FOR ENERGY CONSUMPTION (PCNDEN)

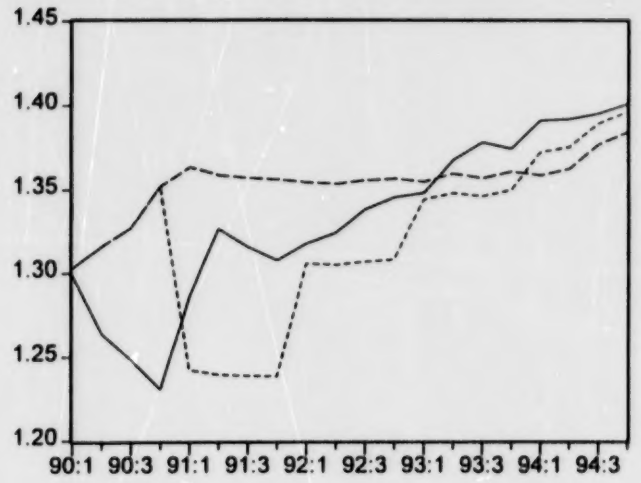


—— ACTUAL ----- 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

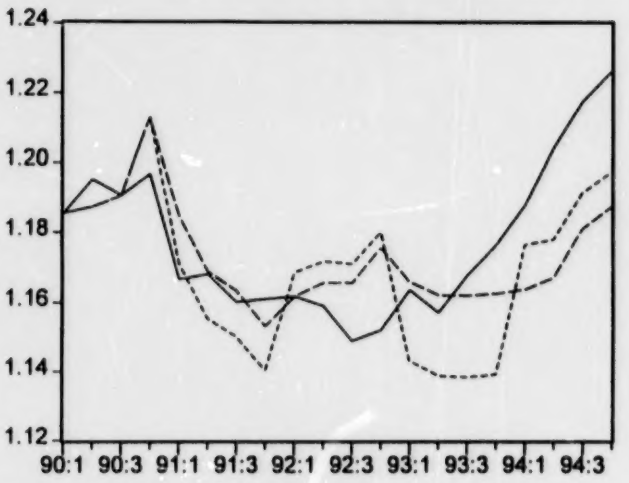
CHART 6

DYNAMIC OUT-OF-SAMPLE FORECASTS: TRANSACTION AND FACTOR PRICES (CONTINUED...)

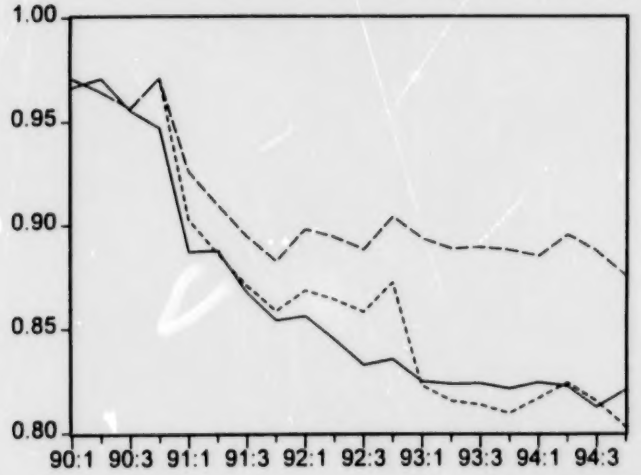
6.5 IMPLICIT PRICE DEFLATOR FOR RESIDENTIAL INVESTMENT (PIRC)



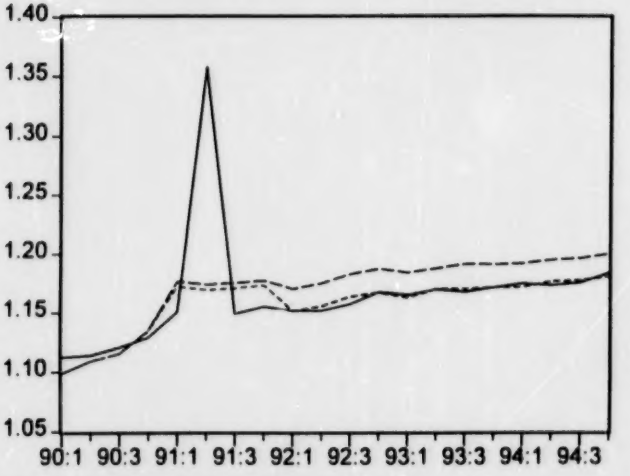
6.6 IMPLICIT PRICE DEFLATOR FOR BUSINESS INVESTMENT IN CONSTRUCTION (PINRC)



6.7 IMPLICIT PRICE DEFLATOR FOR BUSINESS INVESTMENT IN MACHINERY AND EQUIPMENT (PIME)



6.8 IMPLICT PRICE DEFLATOR FOR GOVERNMENT EXPENDITURES ON NON-WAGE GOODS AND SERVICES (PGNWO)

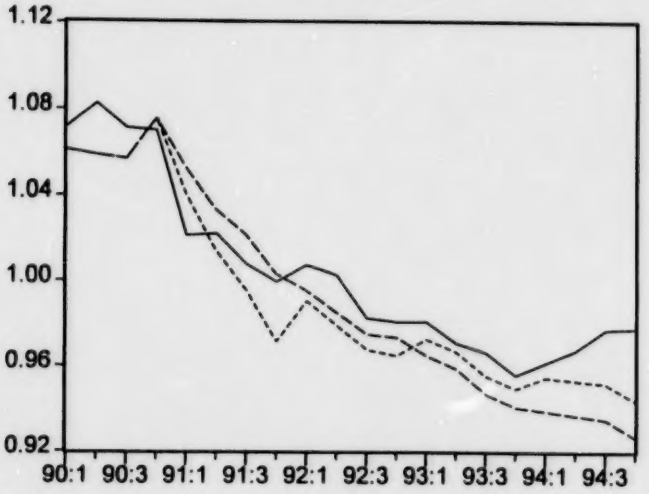


ACTUAL ----- 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

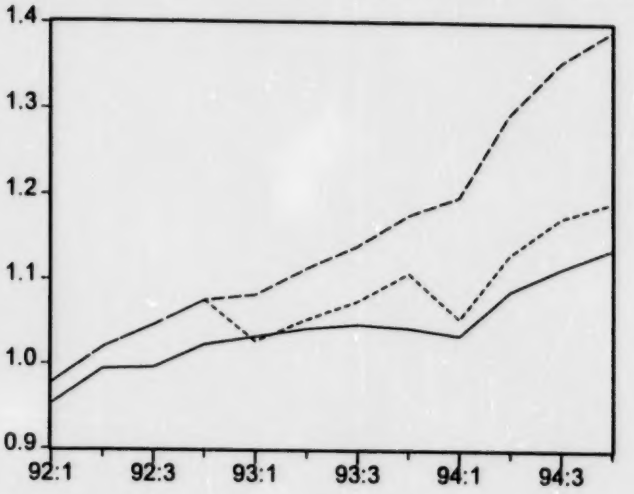
CHART 6

DYNAMIC OUT-OF-SAMPLE FORECASTS: TRANSACTION AND FACTOR PRICES (CONTINUED...)

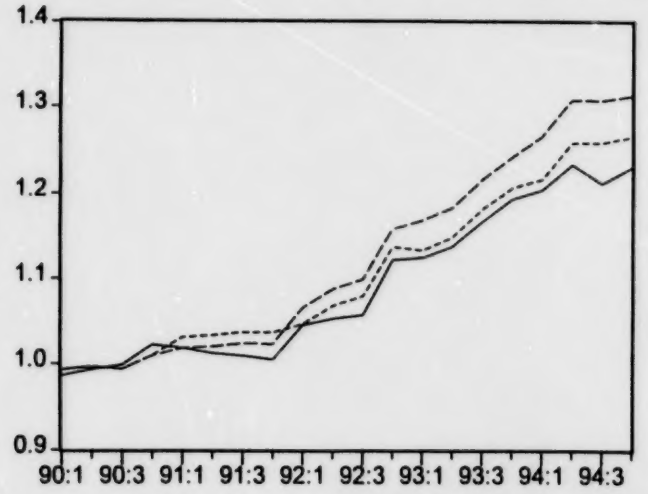
6.9 IMPLICIT PRICE DEFLATOR FOR GOVERNMENT EXPENDITURES ON GROSS FIXED CAPITAL FORMATION (PGCF)



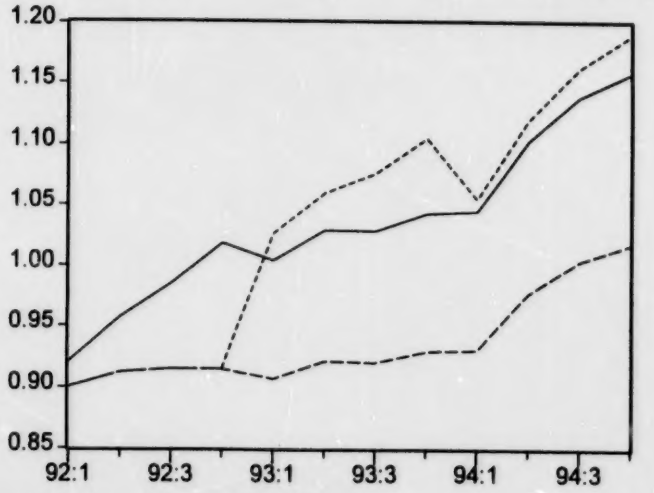
6.10 IMPLICIT PRICE DEFLATOR FOR IMPORTED COMMODITIES (PMC)



6.11 IMPLICIT PRICE DEFLATOR FOR IMPORTED SERVICES (PMS)



6.12 IMPLICIT PRICE DEFLATOR FOR EXPORTED COMMODITIES (PXC)

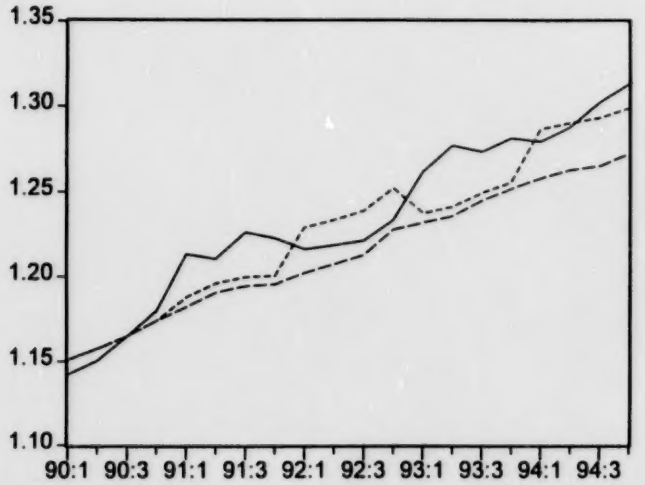


—— ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

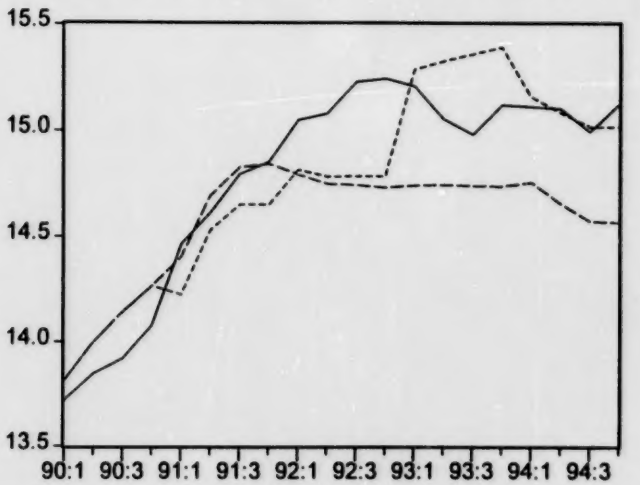
CHART 6

DYNAMIC OUT-OF-SAMPLE FORECASTS: TRANSACTION AND FACTOR PRICES (CONTINUED...)

6.14 IMPLICIT PRICE DEFLATOR FOR EXPORTED SERVICES (PXS)



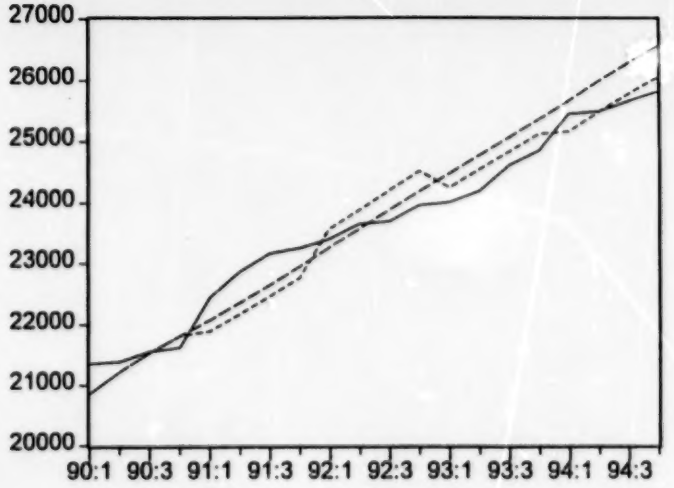
6.15 COMMERCIAL SECTOR HOURLY MARKET WAGE RATE (WRC)



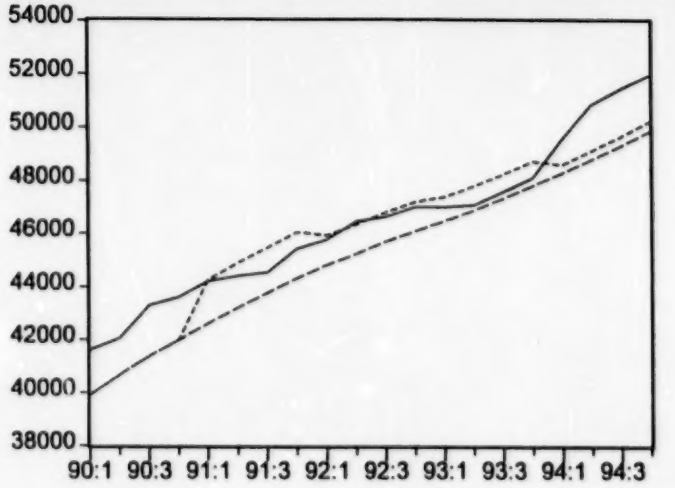
—— ACTUAL ------ 1-YEAR ROLLING FORECAST – – – 5-YEAR FORECAST

CHART 7
DYNAMIC OUT-OF-SAMPLE FORECASTS: INCOME SECTOR

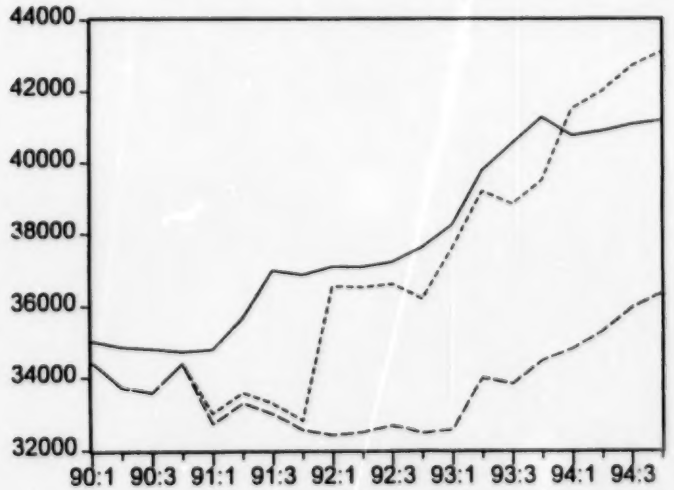
7.1 UNINCORPORATED BUSINESS CAPITAL CONSUMPTION ALLOWANCES (YPCCA)



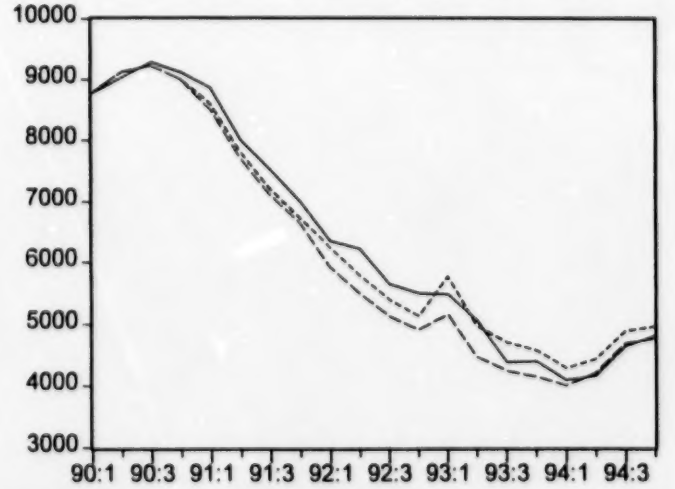
7.2 CORPORATION CAPITAL CONSUMPTION ALLOWANCES (YBCCA)



7.3 NET INCOME OF NON-FARM UNINCORPORATED BUSINESS (YUB)



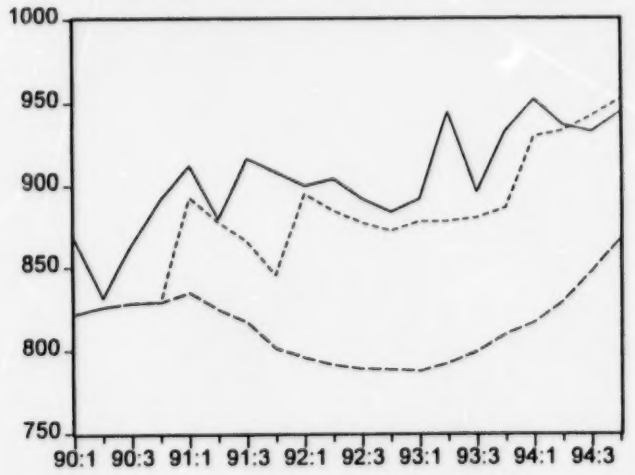
7.4 CURRENT TRANSFERS FROM PERSONS TO CORPORATION (TRBP)



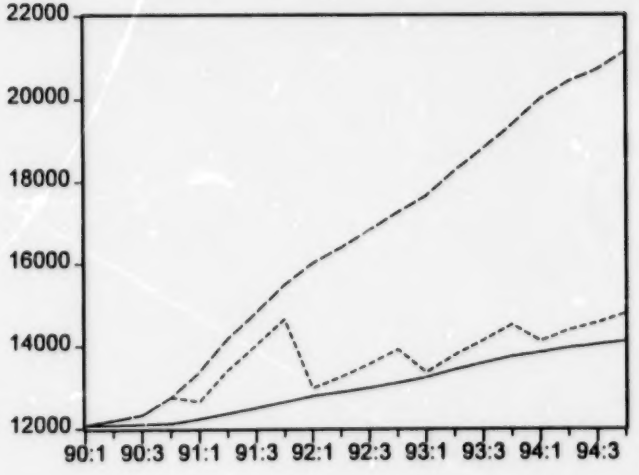
ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

CHART 7
DYNAMIC OUT-OF-SAMPLE FORECASTS: INCOME SECTOR (CONTINUED...)

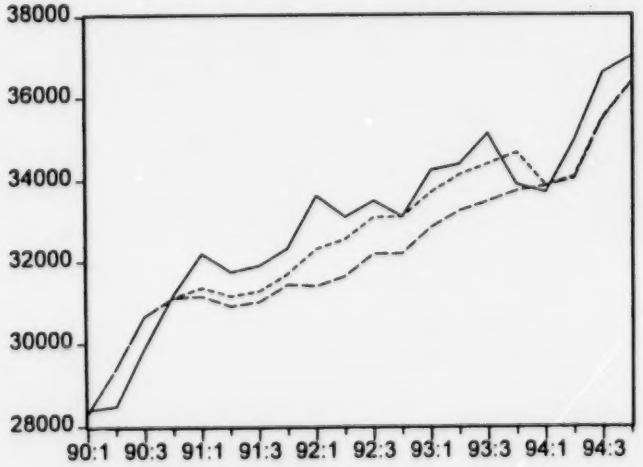
7.5 CURRENT TRANSFERS FROM CORPORATION TO PERSONS (TRPB)



7.6 NET RENTAL INCOME OF NON-FARM UNINCORPORAED BUSINESS (YUBRENT)



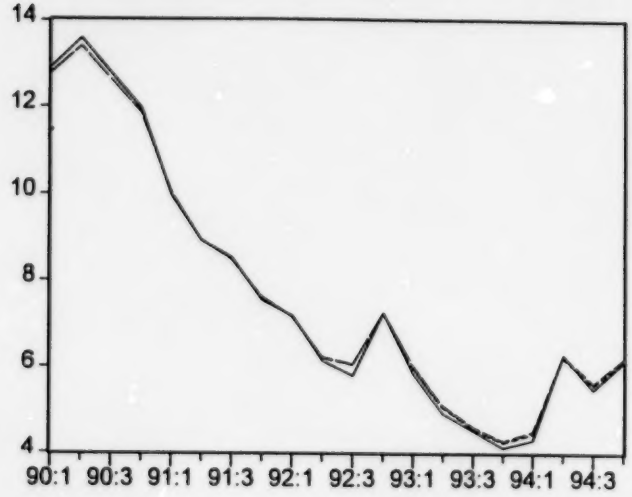
7.7 MORTGAGE INTEREST PAYMENT (TRMORT)



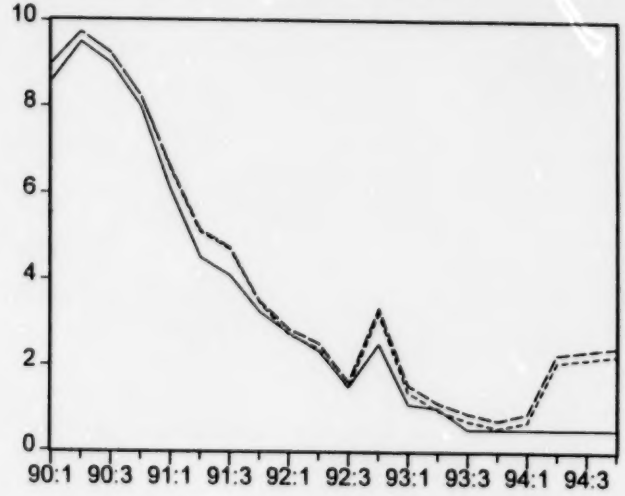
ACTUAL ----- 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

CHART 8
DYNAMIC OUT-OF-SAMPLE FORECASTS: FINANCIAL MARKETS

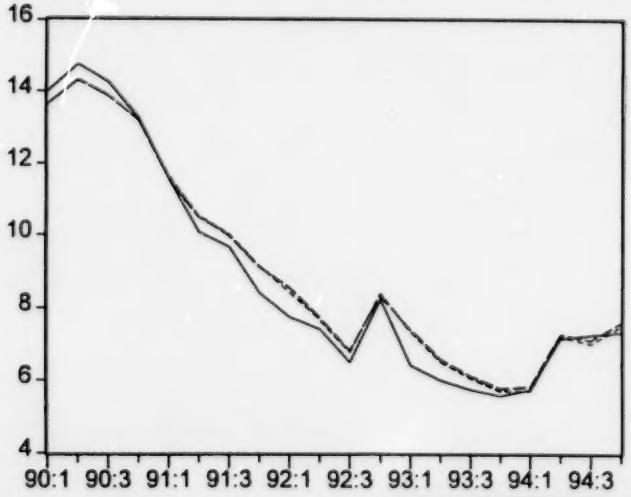
8.1 THREE-MONTH TREASURY BILL RATE (RTB)



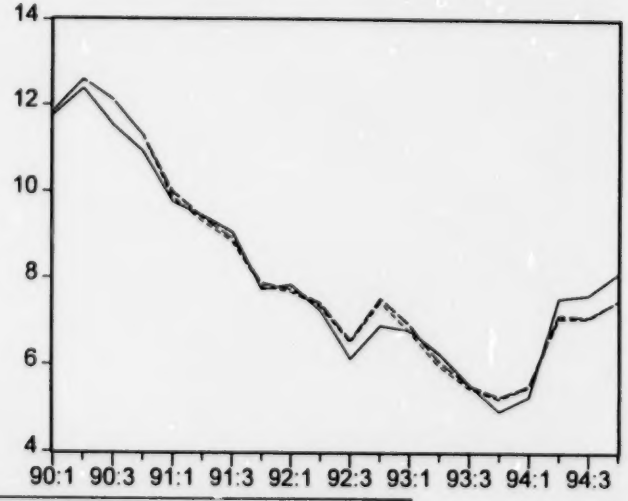
8.2 NON-CHEQUABLE SAVINGS DEPOSIT RATE (RCBNC)



8.3 CHARTERED BANK RATE ON PIME BUSINESS LOANS (RCBP)



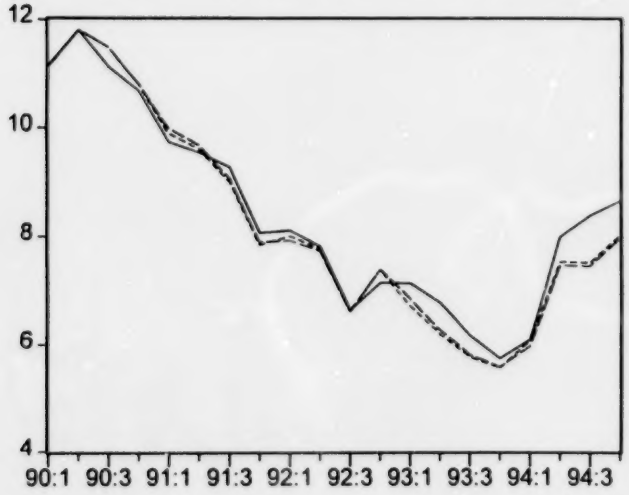
8.4 AVERAGE YIELD ON GOVERNMENT OF CANADA BONDS, 1-3 YEARS (RGCB13)



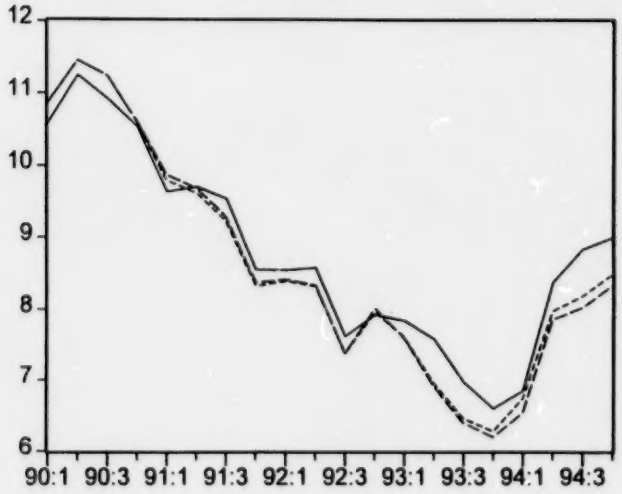
—— ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

CHART 8
DYNAMIC OUT-OF-SAMPLE FORECASTS: FINANCIAL MARKETS (CONTINUED...)

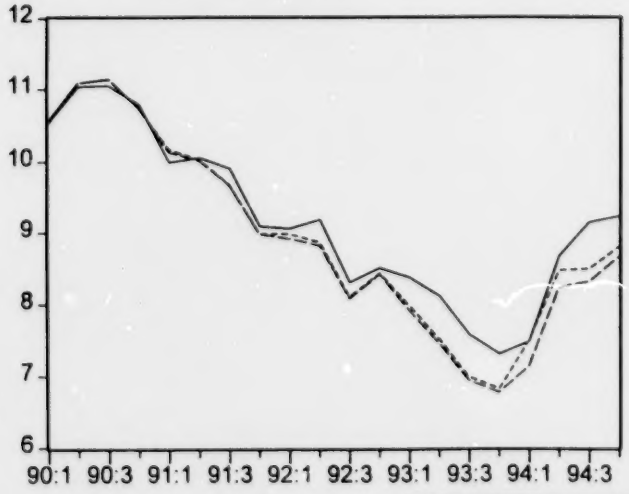
8.5 AVERAGE YIELD ON GOVERNMENT OF CANADA BONDS, 3-5 YEAR (RGCB35)



8.6 AVERAGE YIELD ON GOVERNMENT OF CANADA BONDS, 5-10 YEAR (RGCB510)



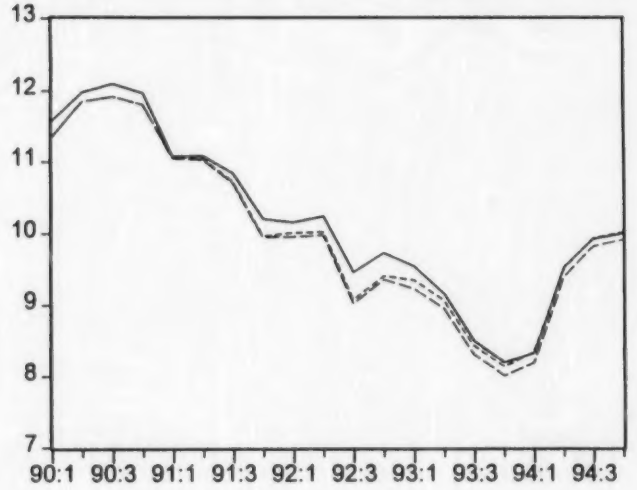
8.7 AVERAGE YIELD ON GOVERNMENT OF CANADA BONDS OVER 10 YEARS (RGCB10)



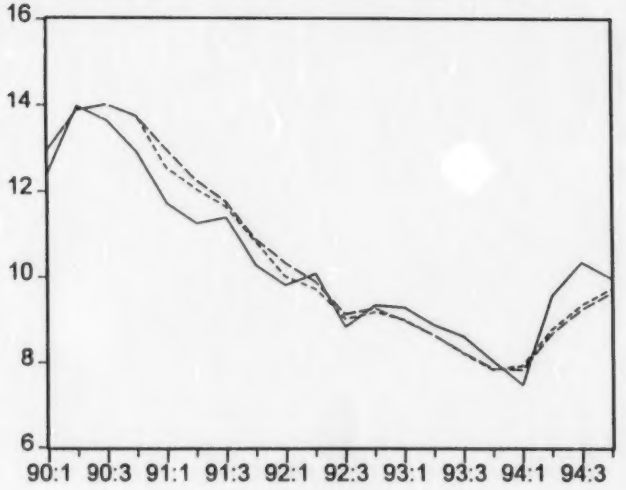
8.8 AVERAGE YIELD ON PROVINCIAL BONDS (RBOND)

CHART 8
DYNAMIC OUT-OF-SAMPLE FORECASTS: FINANCIAL MARKETS (CONTINUED...)

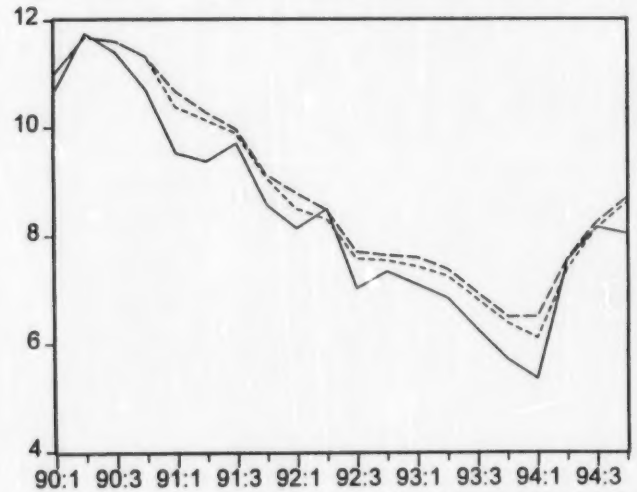
8.9 AVERAGE YIELD ON INDUSTRIAL BONDS (RMYWI)



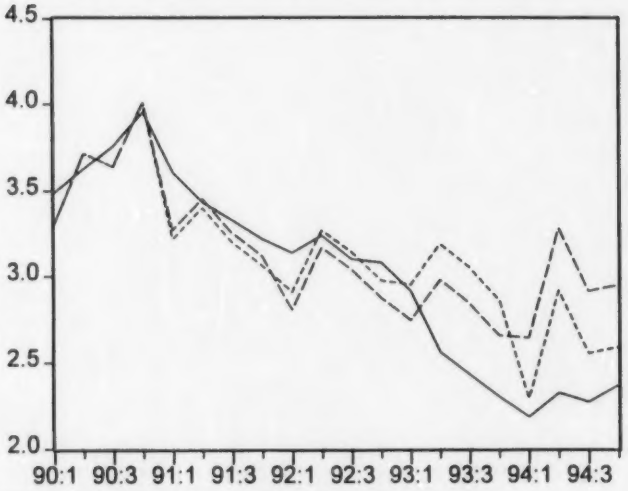
8.10 5-YEAR MORTGAGE RATE (RMC)



8.11 TRUST COMPANY 5-YEAR GIC RATE (RTCGIC)



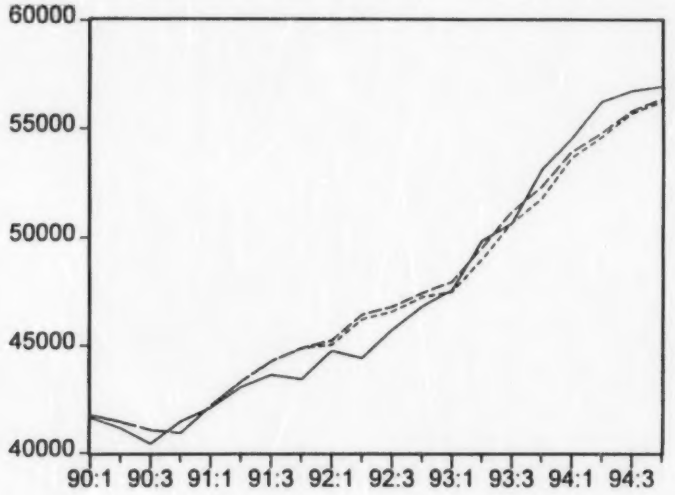
8.12 TSE DIVEDEND YIELD RATIO (RDYTSE)



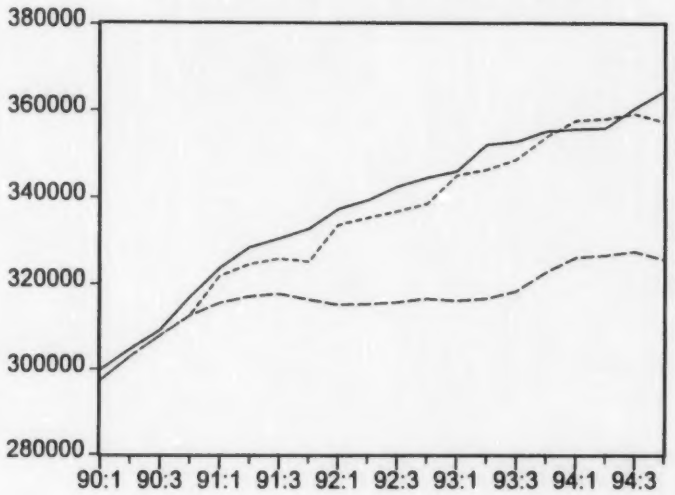
ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

CHART 8
DYNAMIC OUT-OF-SAMPLE FORECASTS: FINANCIAL MARKETS (CONTINUED...)

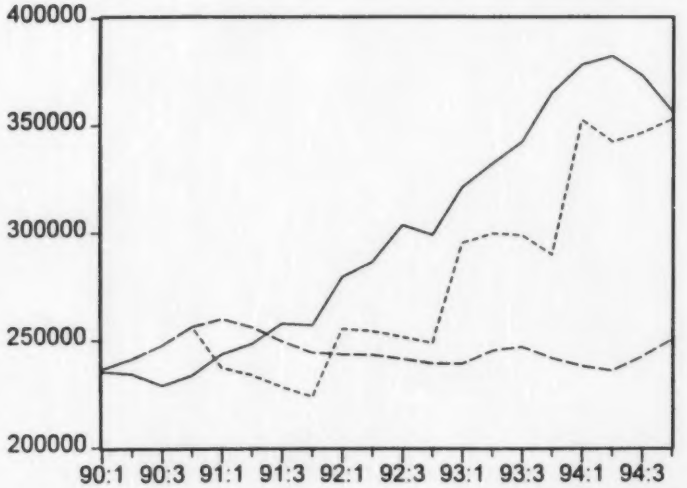
8.13 M1 MONETARY AGGREGATE (DM1Y)



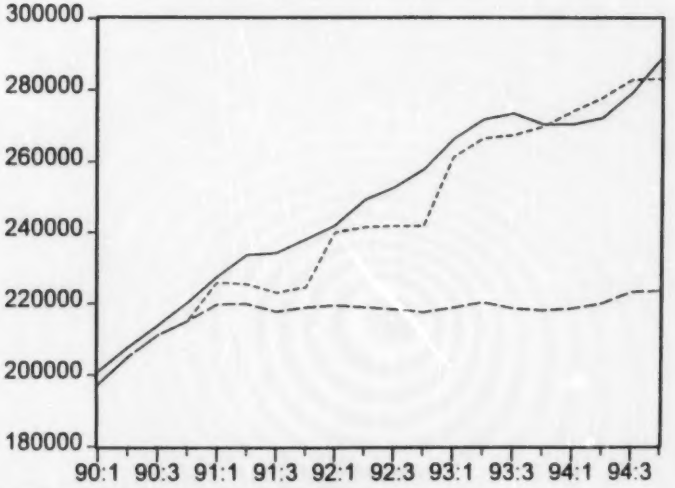
8.14 M2 MONETARY AGGREGATE (DM2Y)



8.15 IMPLICIT ASSET STOCK OF LIFE INSURANCE COMPANY (DLICA)



8.16 PERSONAL FIXED-TERM DEPOSITS (DFT)



ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

CHART 8
DYNAMIC OUT-OF-SAMPLE FORECASTS: FINANCIAL MARKETS (CONTINUED...)

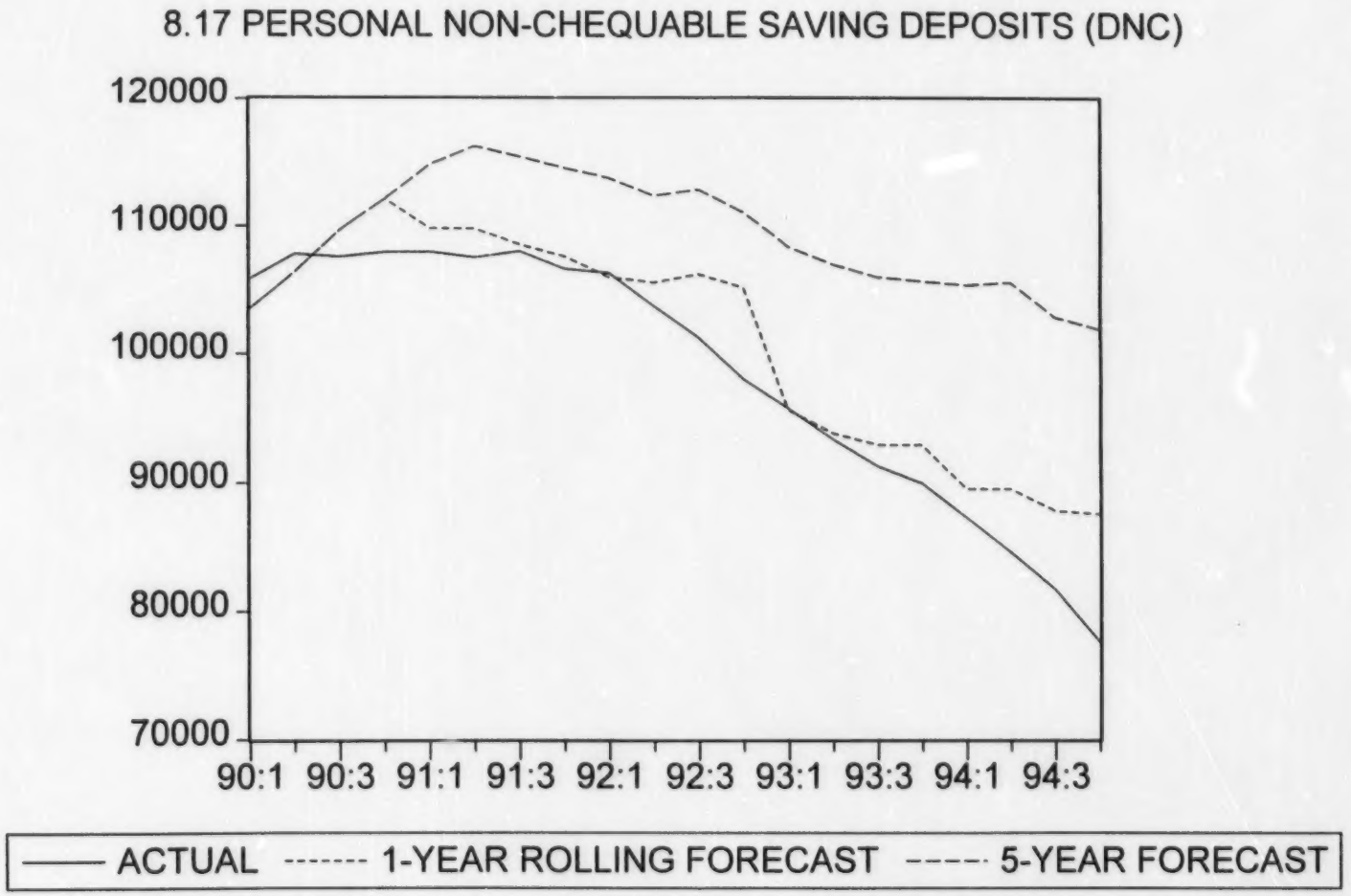
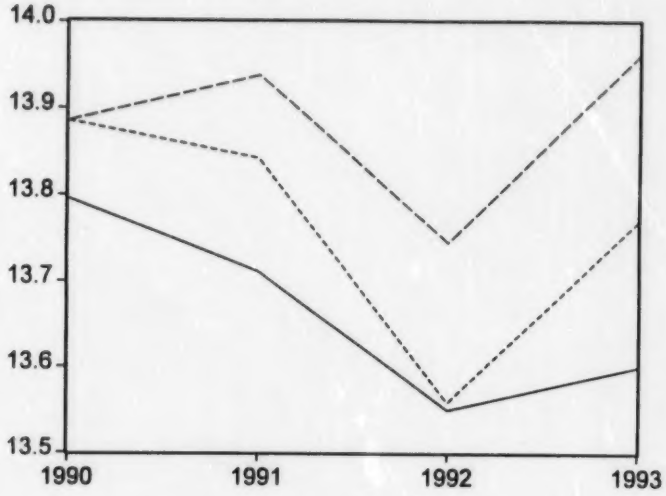
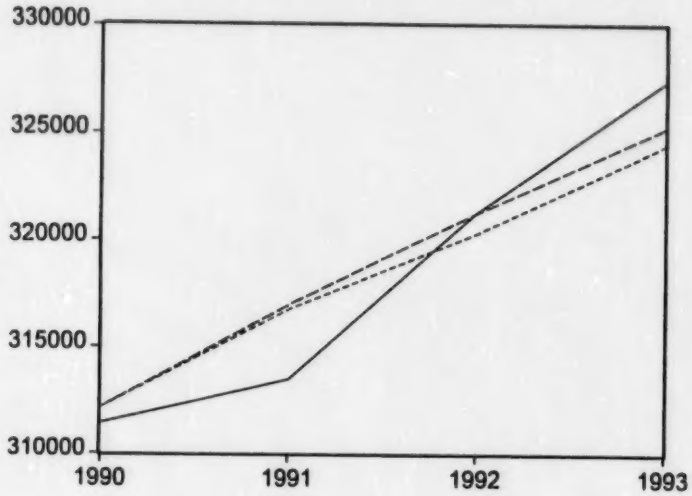


CHART 9
DYNAMIC OUT-OF-SAMPLE FORECASTS: FEDERAL PERSONAL INCOME TAX

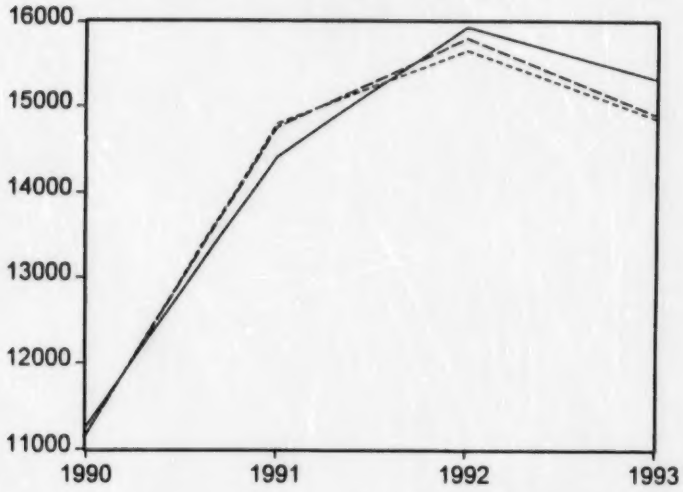
9.1 TOTAL NUMBER OF TAXABLE FILERS (FNFILE)



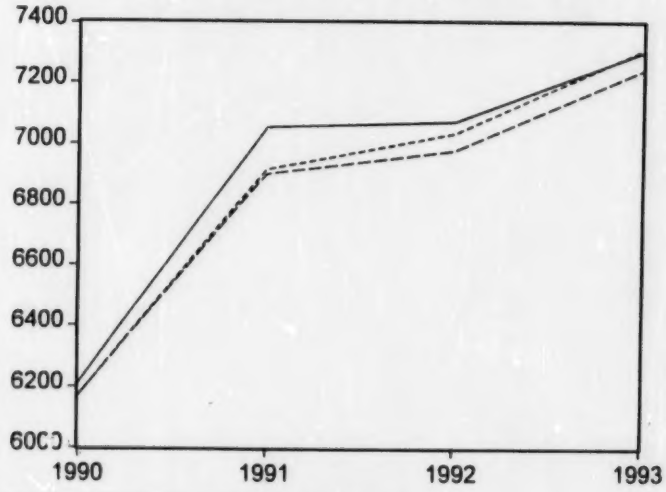
9.2 TOTAL EMPLOYMENT EARNINGS (TPYEMP)



9.3 UNEMPLOYMENT INSURANCE BENEFITS (TPYUIB)



9.4 OLD AGE PENSION BENEFITS (TPYOAP)



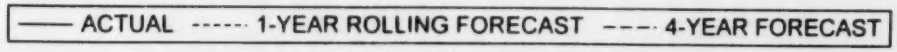
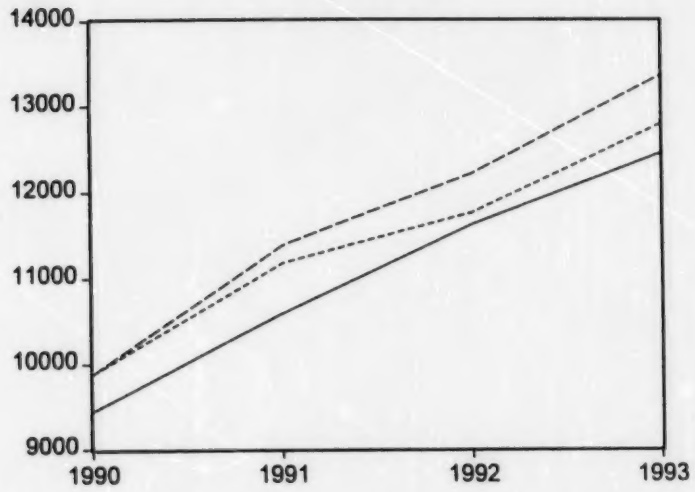


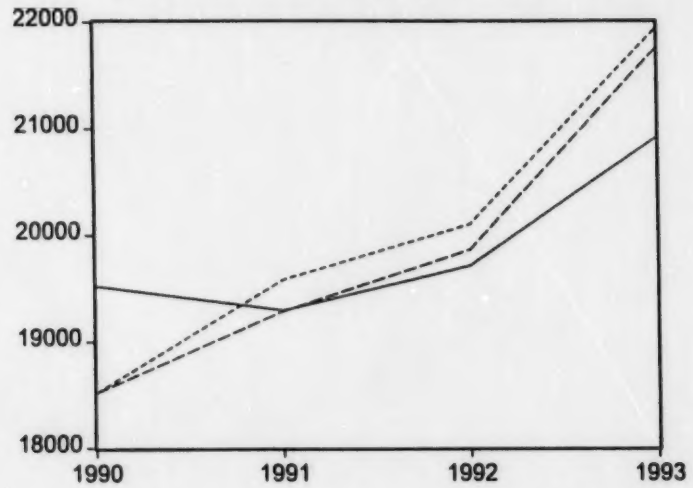
CHART 9

DYNAMIC OUT-OF-SAMPLE FORECASTS: FEDERAL PERSONAL INCOME TAX (CONTINUED...)

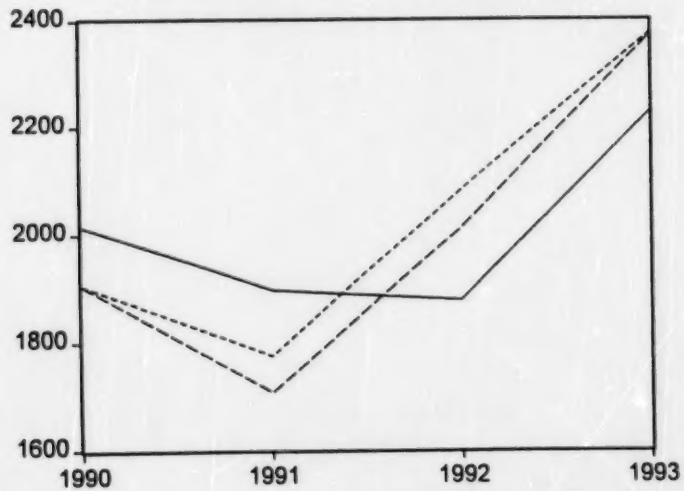
9.5 CPP/QPP BENEFITS (TPYCQP)



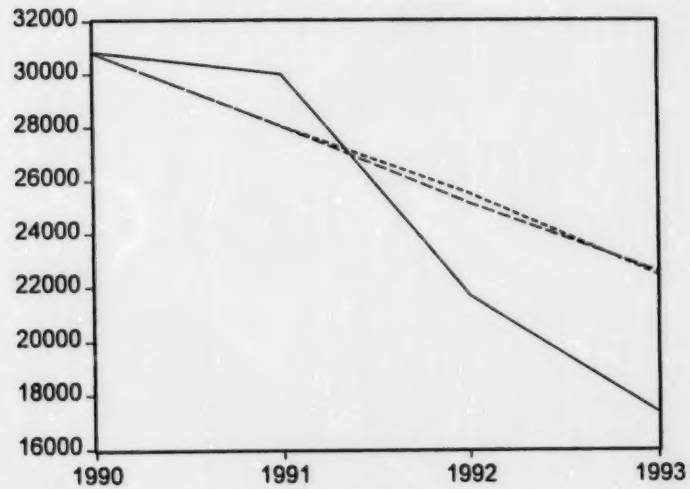
9.6 NET NON-FARM BUSINESS INCOME (TPYBUS)



9.7 NET FARMING AND FISHING INCOME (TPYFARM)



9.8 INVESTMENT INCOME (TPYINV)

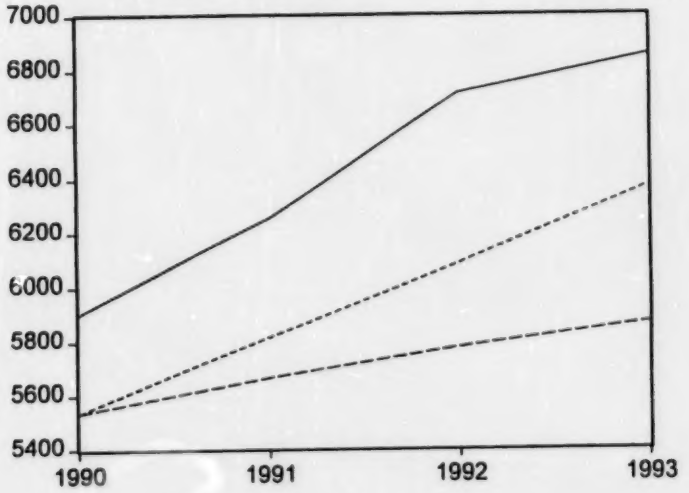


ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 4-YEAR FORECAST

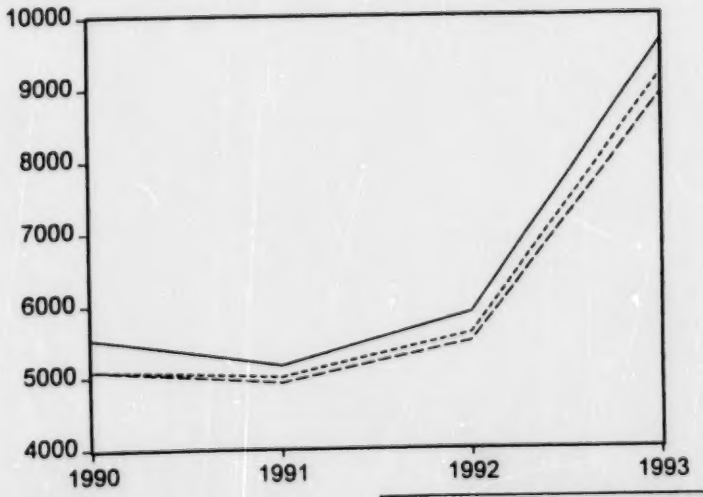
CHART 9

DYNAMIC OUT-OF-SAMPLE FORECASTS: FEDERAL PERSONAL INCOME TAX (CONTINUED...)

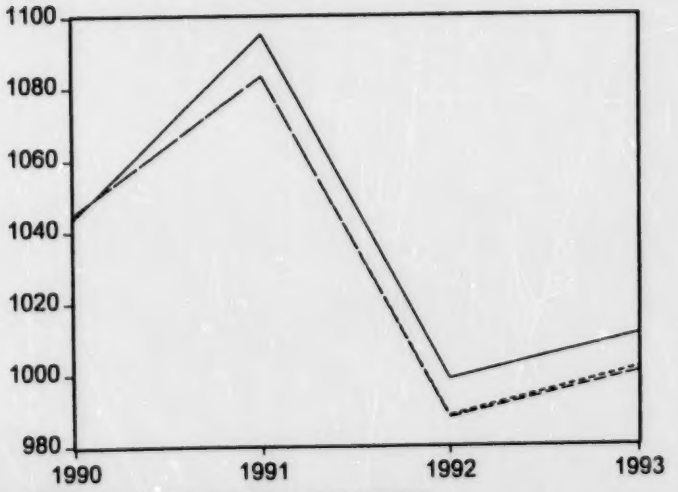
9.9 REGISTED PENSION PLAN CONTRIBUTIONS (TPDRPP)



9.11 CAPITAL GAIN EXEMPTION (TPDGAIN)



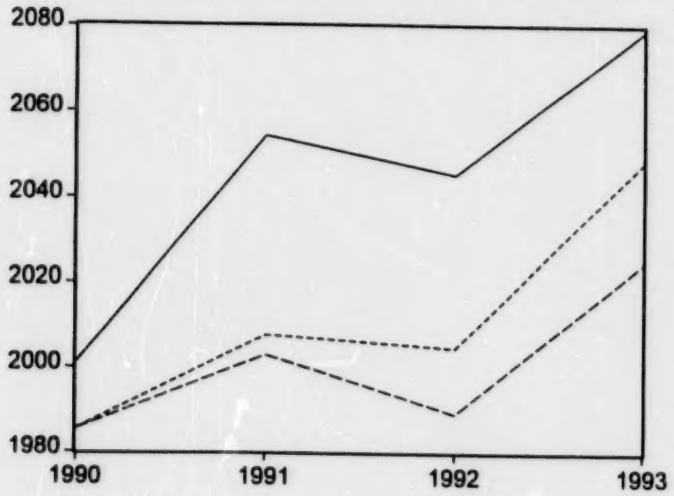
9.12 DIVIDEND TAX CREDITS (TTCDIV)



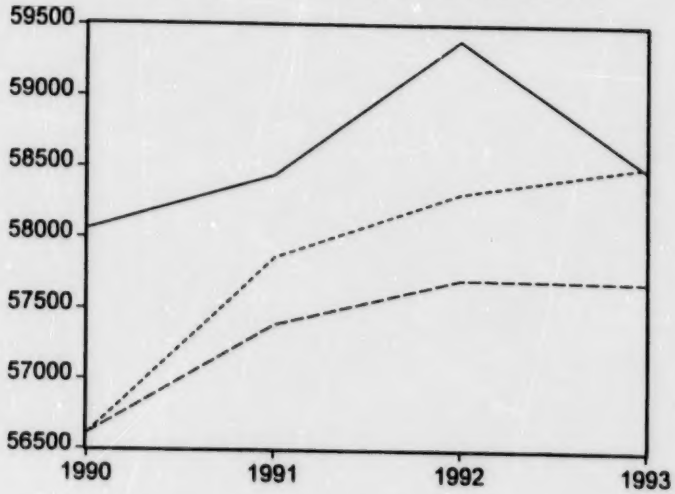
ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 4-YEAR FORECAST

CHART 9
DYNAMIC OUT-OF-SAMPLE FORECASTS: FEDERAL PERSONAL INCOME TAX (CONTINUED)

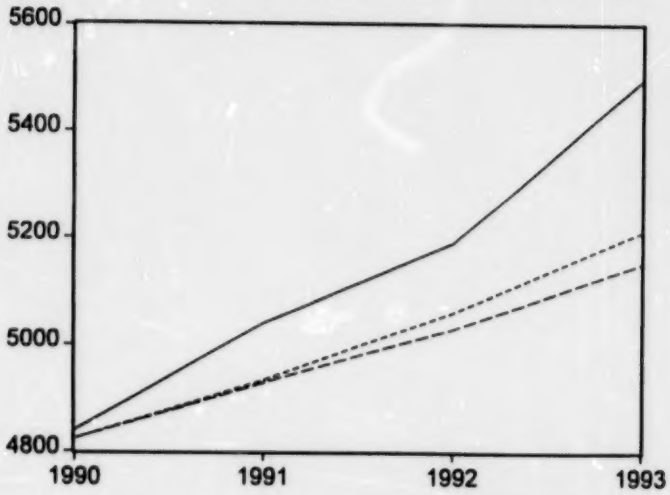
9.13 QUEBEC ABATEMENT FOR PIT (TPABATQ)



9.14 FEDERAL PERSONAL INCOME TAX REVENUE ON A NATIONAL ACCOUNT BASIS (TPYF)



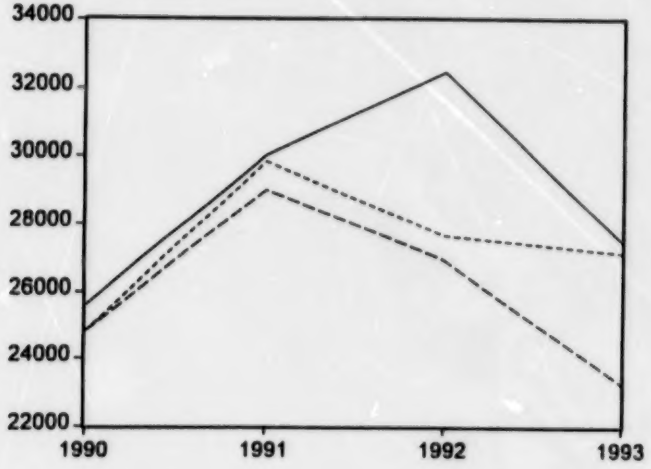
9.15 PIT MISCELLANEOUS DEDUCTIONS (TPDMIS)



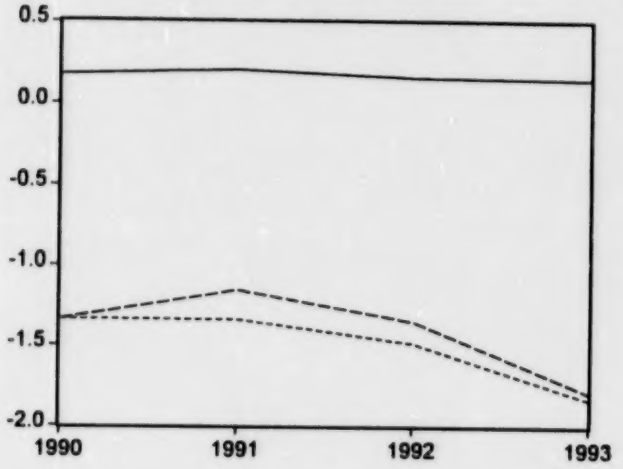
—— ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 4-YEAR FORECAST

CHART 10
DYNAMIC OUT-OF-SAMPLE FORECASTS: FEDERAL CORPORATE TAX

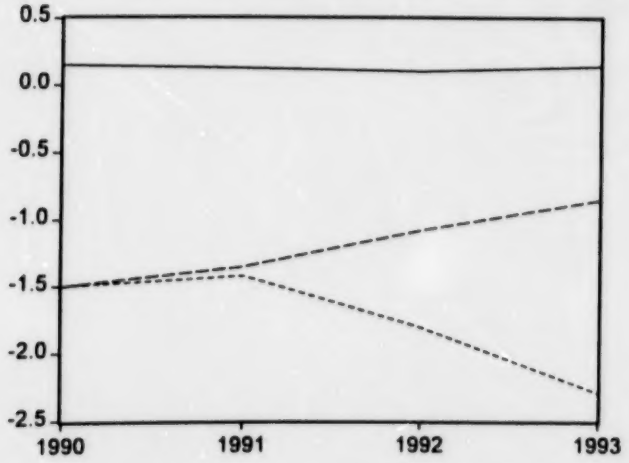
10.1 CORPORATION CURRENT-YEAR LOSSES (TYCCYL)



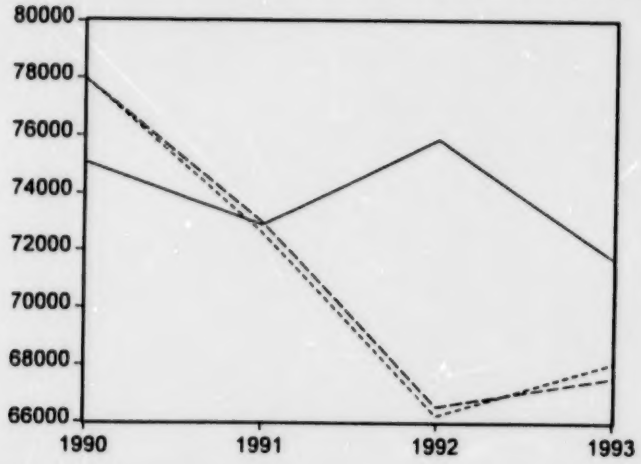
10.2 RATE AT WHICH CURRENT-YEAR LOSSES ARE CARRIED BACK (TCUSELCB)



10.3 RATE AT WHICH PRIOR-YEAR LOSSES ARE APPLIED (TCUSEPYL)



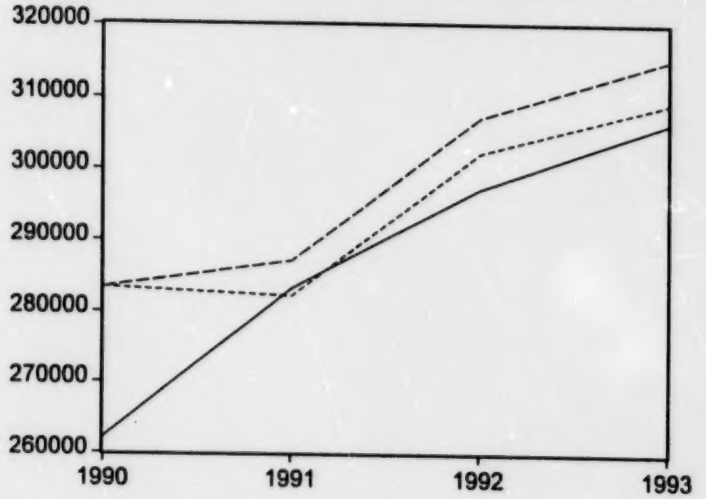
10.4 UNDEPRECIATED CAPITAL COST OF ADDITIONS (TCUCCCOA)



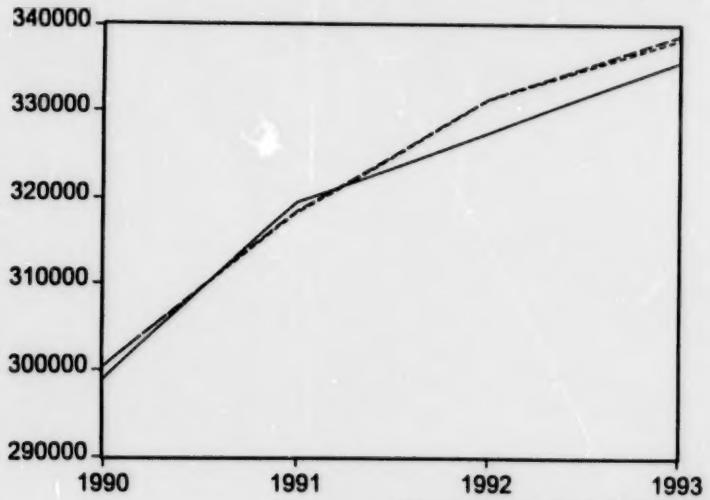
ACTUAL ----- 1-YEAR ROLLING FORECAST --- 4-YEAR FORECAST

CHART 10
DYNAMIC OUT-OF-SAMPLE FORECASTS: FEDERAL CORPORATE TAX (CONTINUED...)

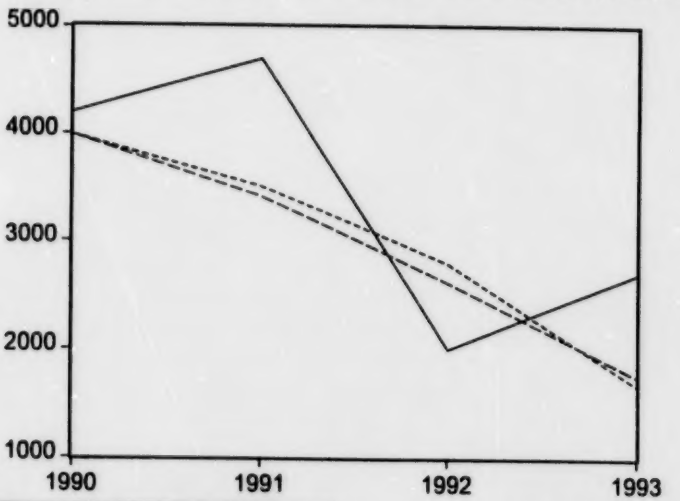
10.6 UNDEPRECIATED CAPITAL COST OPENING BALANCE (TCUCCOB)



10.7 UNDEPRECIATED CAPITAL COST BEFORE CLAIM (TCUCCBC)



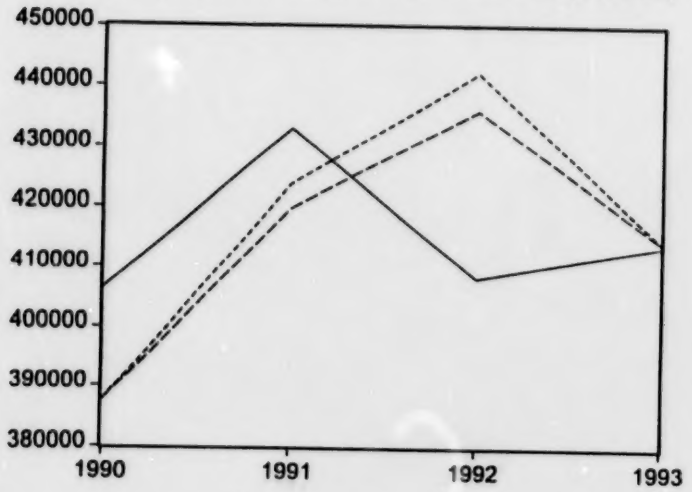
10.8 UNDEPRECIATED CAPITAL COST ADJUSTMENTS (TCUCCA)



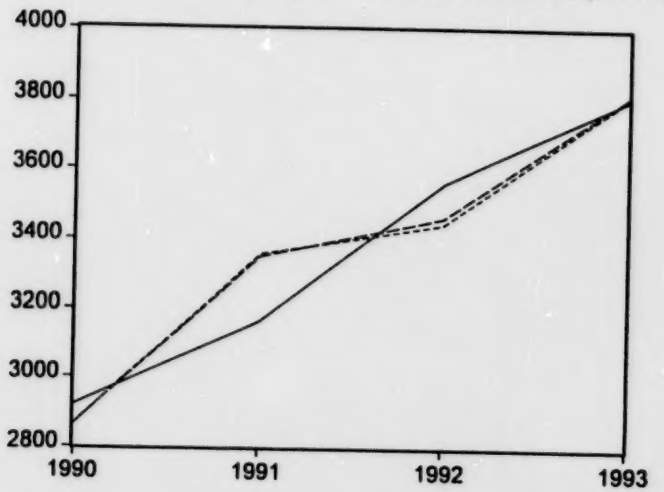
ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 4-YEAR FORECAST

CHART 10
DYNAMIC OUT-OF-SAMPLE FORECASTS: FEDERAL CORPORATE TAX (CONTINUED...)

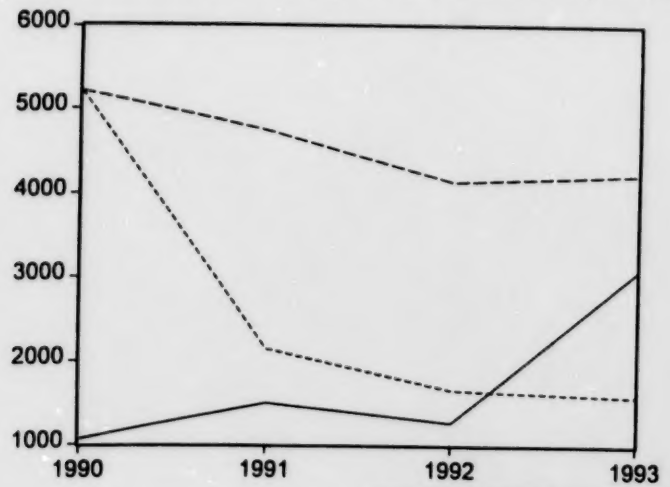
10.9 BOOK DEPRECIATION BEFORE CLAIM (TCBDBC)



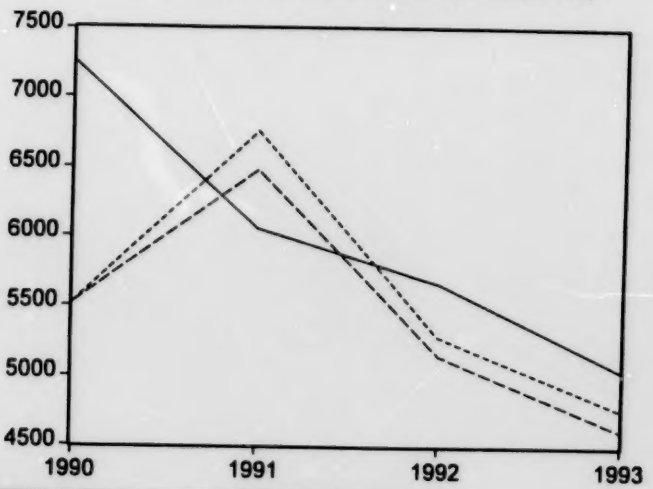
10.10 INVESTMENT TAX CREDIT OPENING BALANCE (TCITCOB)



10.11 NON-SR&ED ITC QUALIFYING EXPENDITURES (TCITCENS)



10.12 CUMULATIVE CANADIAN DEVELOPMENT EXPENSES OPENING BALANCE (TCCCDEOB)

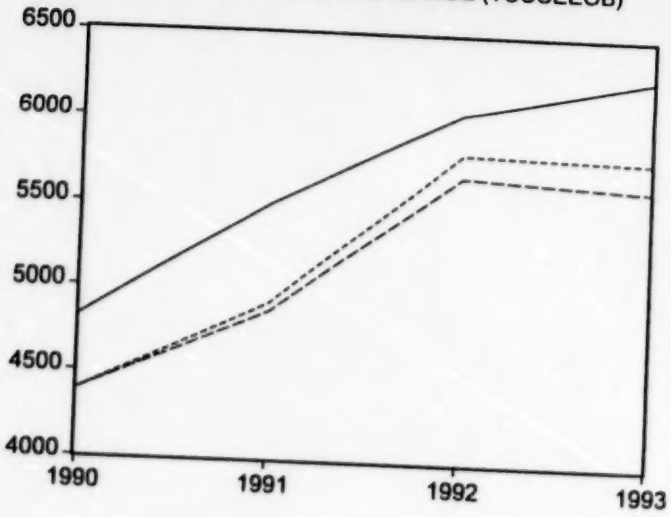


ACTUAL ----- 1-YEAR ROLLING FORECAST ---- 4-YEAR FORECAST

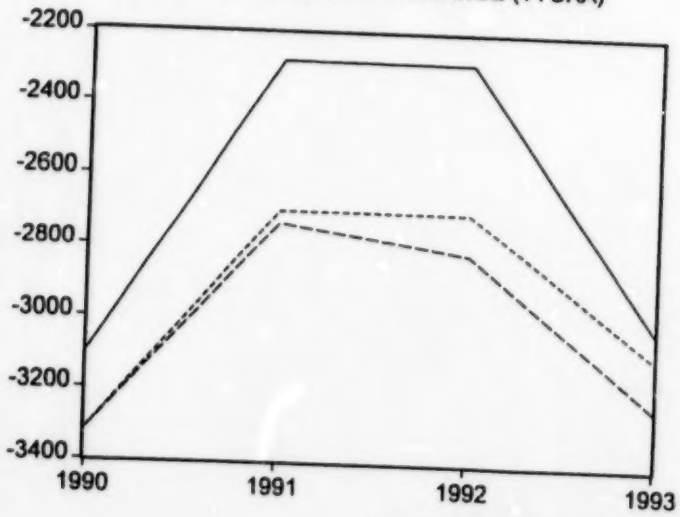
CHART 10

DYNAMIC OUT-OF-SAMPLE FORECASTS: FEDERAL CORPORATE TAX (CONT!NUED...)

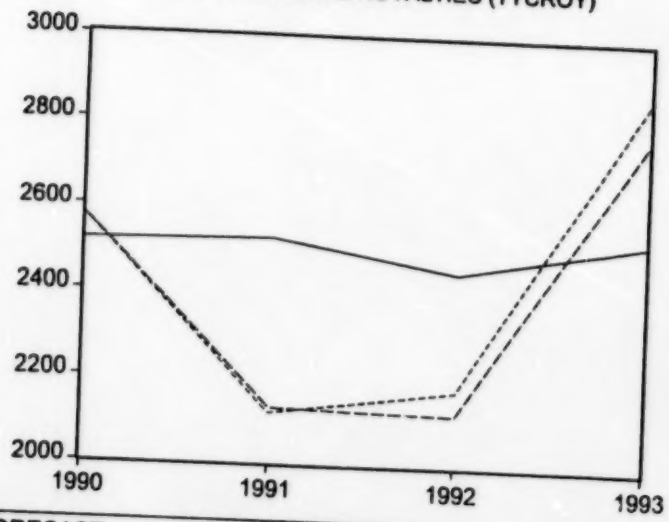
10.13 CUMULATIVE CANADIAN EXPLORATION EXPENSES OPENING BALANCE (TCCCEEOB)



10.15 RESOURCE ALLOWANCE (TYCRA)



10.16 PROVINCIAL ROYALTIES (TYCROY)

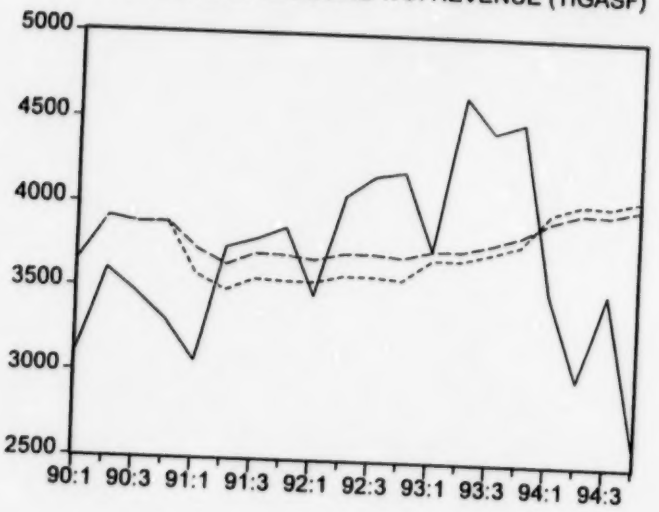


ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 4-YEAR FORECAST

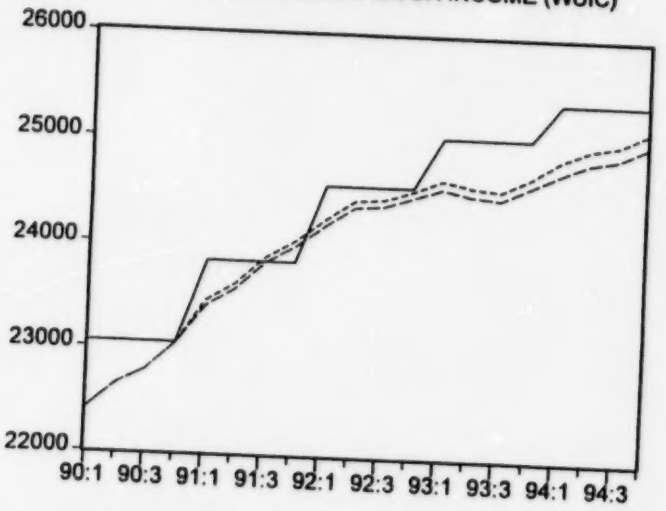
CHART 11

DYNAMIC OUT-OF-SAMPLE FORECASTS: OTHER FEDERAL GOVERNMENT REVENUES AND CPP/QPP

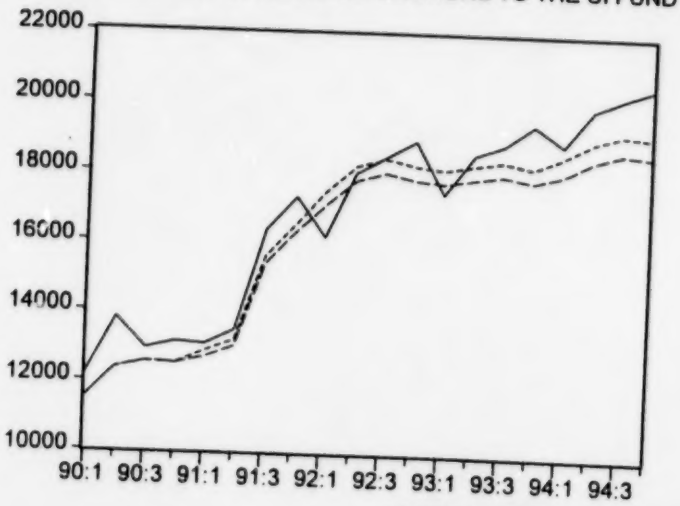
11.1 FEDERAL GASOLINE TAX REVENUE (TIGASF)



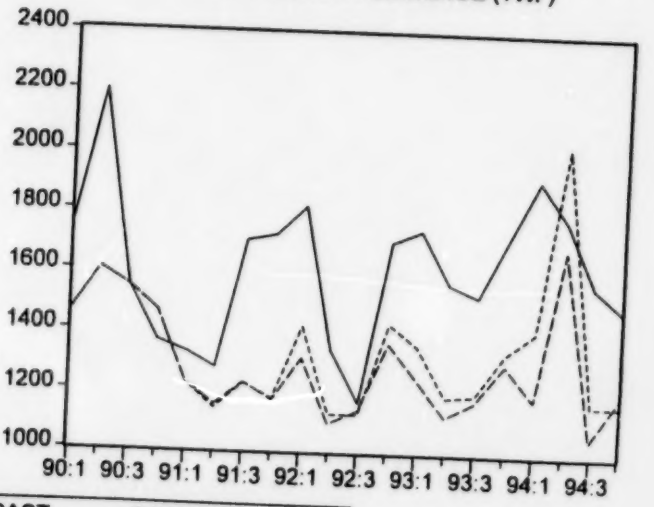
11.2 UI INSURABLE LABOUR INCOME (WUIC)



11.3 EMPLOYER/EMPLOYEE CONTRIBUTIONS TO THE UI FUND (TUIRF)



11.4 FEDERAL REVENUES FROM THE WITHHOLDING TAX ON NON-RESIDENCE (TWF)

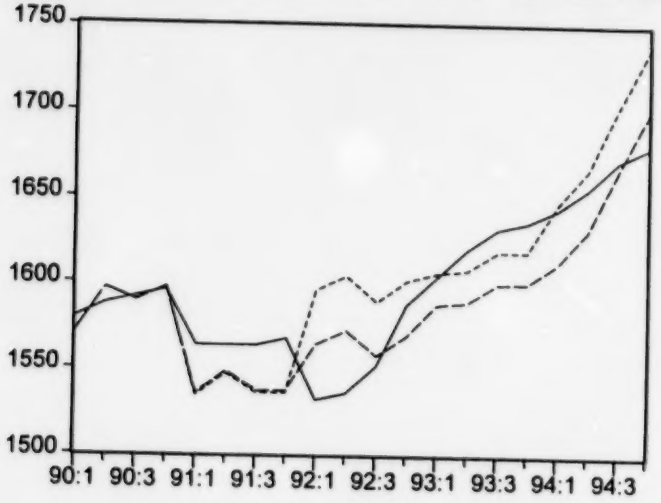


ACTUAL ----- 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

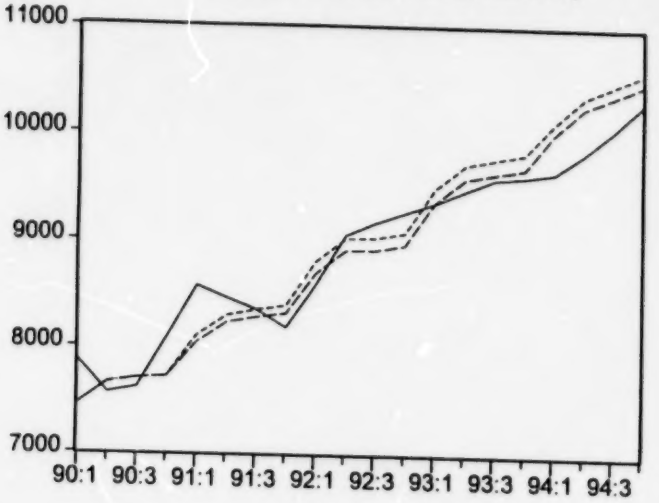
CHART 11

DYNAMIC OUT-OF-SAMPLE FORECASTS: OTHER FEDERAL GOVERNMENT REVENUES AND CPP/QPP (CONTINUED...)

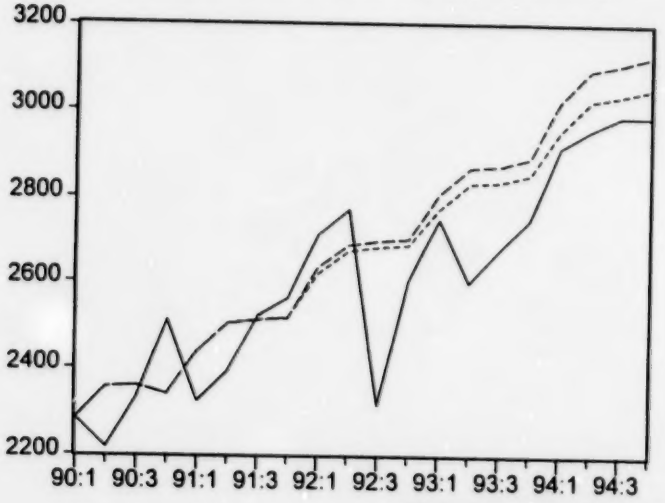
11.5 FEDERAL GOVERNMENT CAPITAL CONSUMPTION ALLOWANCE (TCAGF)



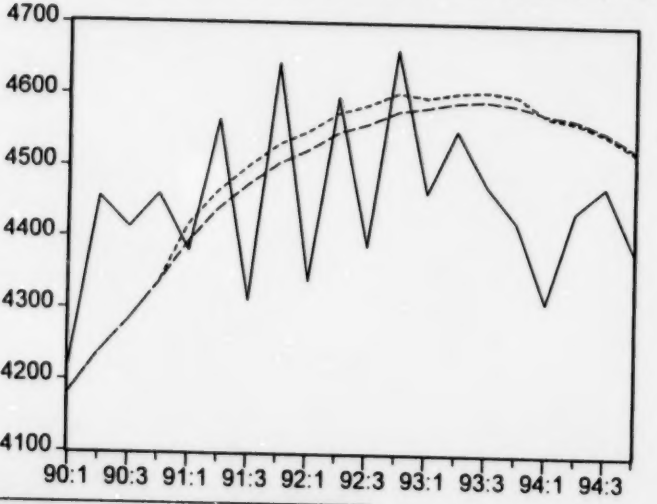
11.6 EMPLOYER/EMPLOYEE CONTRIBUTIONS TO THE CANADA PENSION PLAN (TCOCPP)



11.7 EMPLOYER/EMPLOYEE CONTRIBUTIONS TO THE QUEBEC PENSION PLAN (TCOQPP)



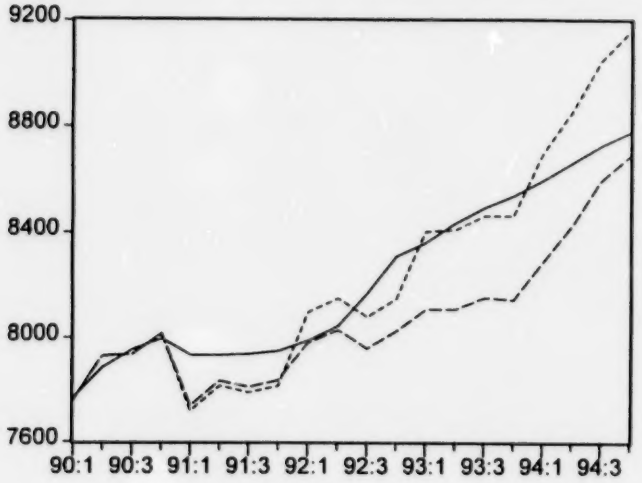
11.8 CANADA PENSION PLAN INVESTMENT INCOME (YIICPP)



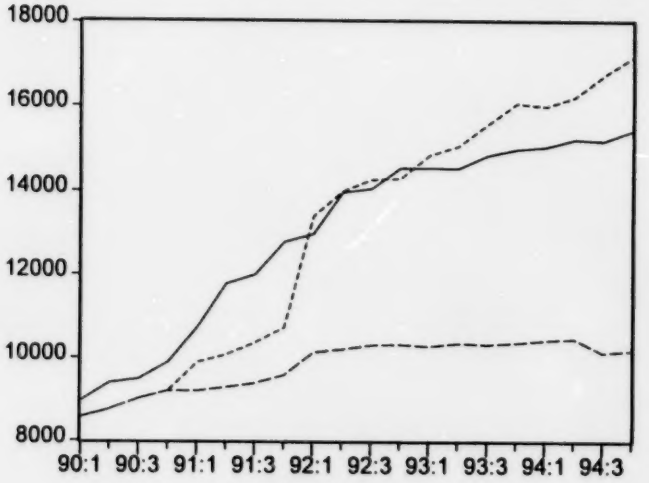
ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

CHART 12
DYNAMIC OUT-OF-SAMPLE FORECASTS: PLH SECTOR

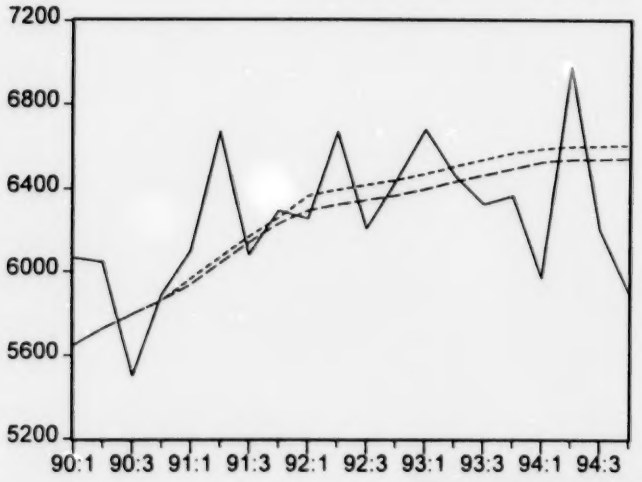
12.1 PLH CAPITAL CONSUMPTION ALLOWANCES (TCAGP)



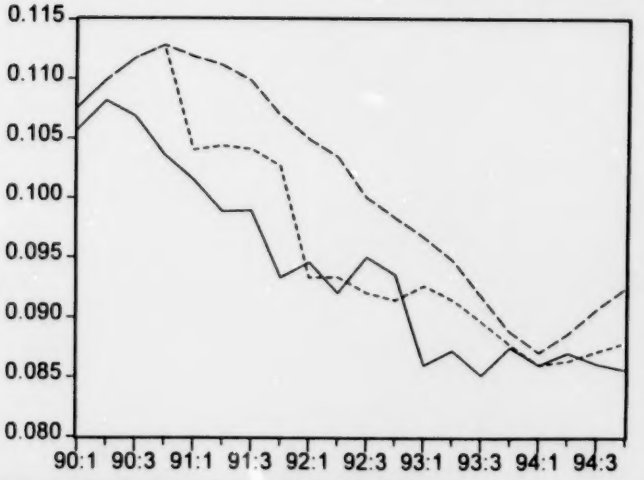
12.2 PLH TRANSFERS TO PERSONS FOR DIRECT RELIEF (GTPRELP)



12.3 PLH TRANSFERS TO PERSONS FOR POST-SECONDARY EDUCATION (GTPEDP)



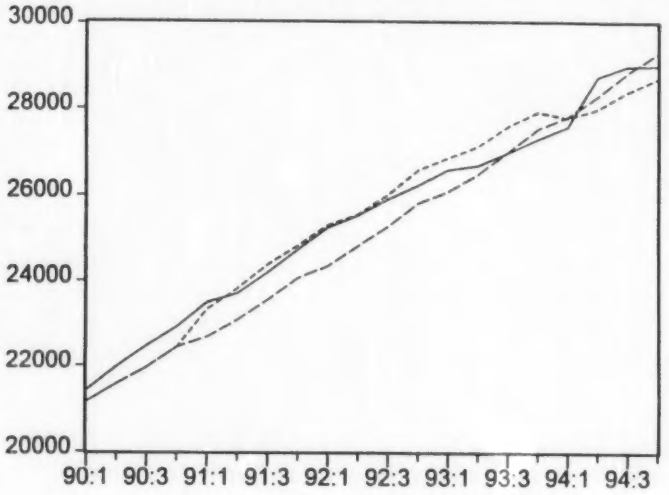
12.4 EFFECTIVE RATE FOR DEBT CHARGES, EXCLUDING CPP (RGIDXC)



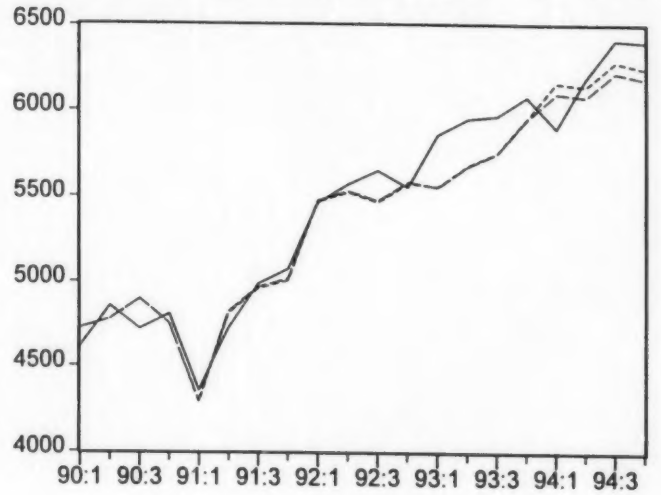
ACTUAL ----- 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

CHART 12
DYNAMIC OUT-OF-SAMPLE FORECASTS: PLH SECTOR (CONTINUED...)

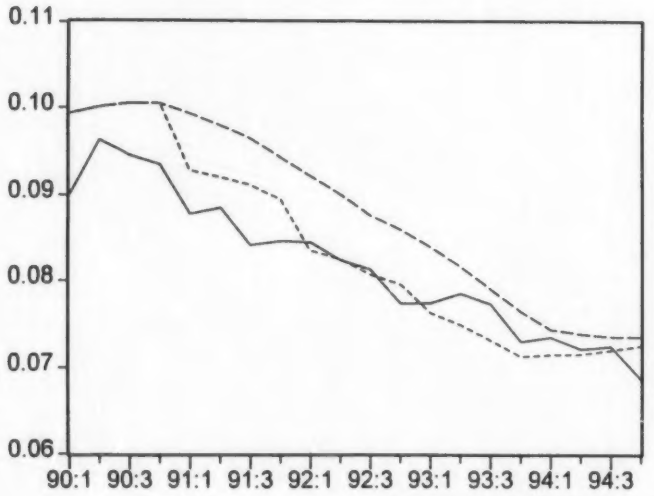
12.5 PLH INDIRECT TAXES-PROPERTY TAXES (TIPTP)



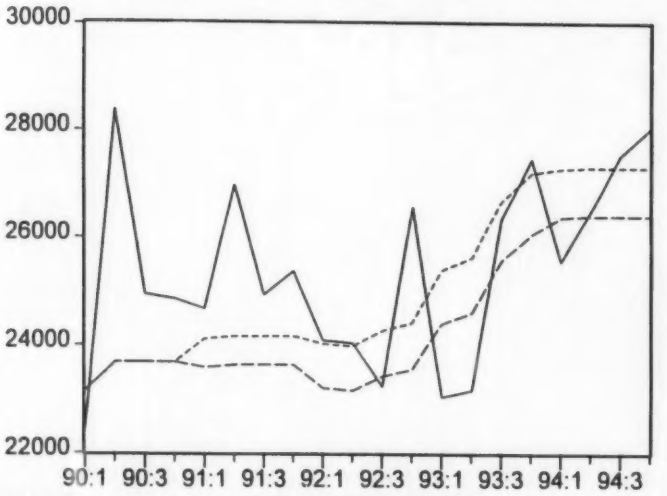
12.6 PLH INDIRECT TAXES-MOTOR FUEL TAXES (TIFUP)



12.7 EFFECTIVE INTEREST RATE
FOR INTEREST INCOME (RYGXPFTP)



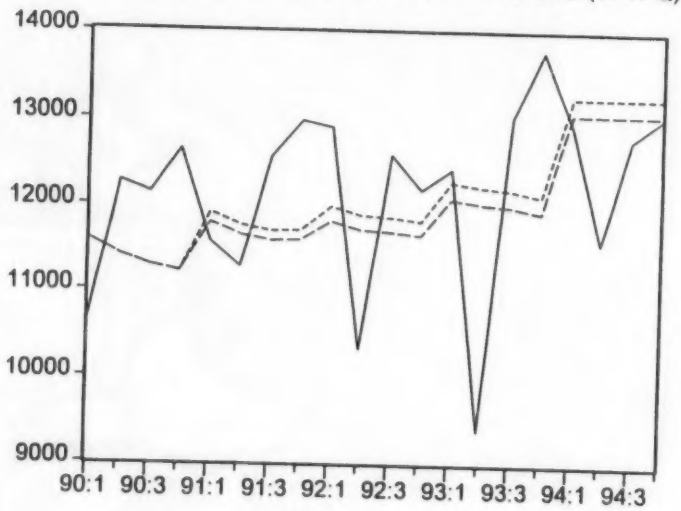
12.8 PROVINCIAL PERSONAL INCOME TAX
COLLECTION, EXCLUDING QUEBEC (TPYPXQ)



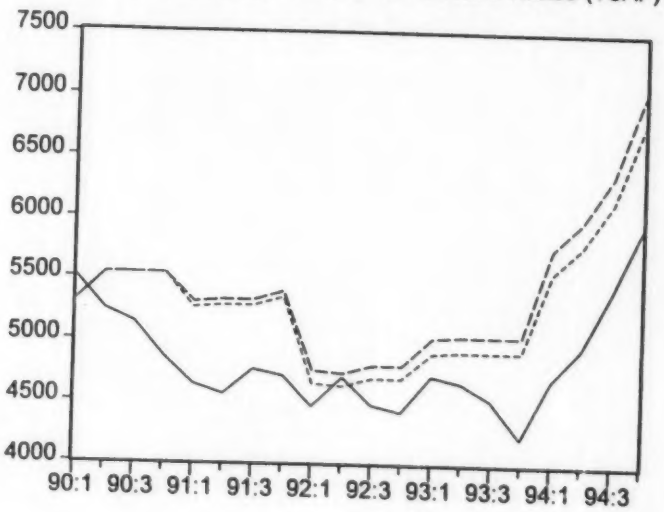
AUTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

CHART 12
DYNAMIC OUT-OF-SAMPLE FORECASTS: PLH SECTOR (CONTINUED...)

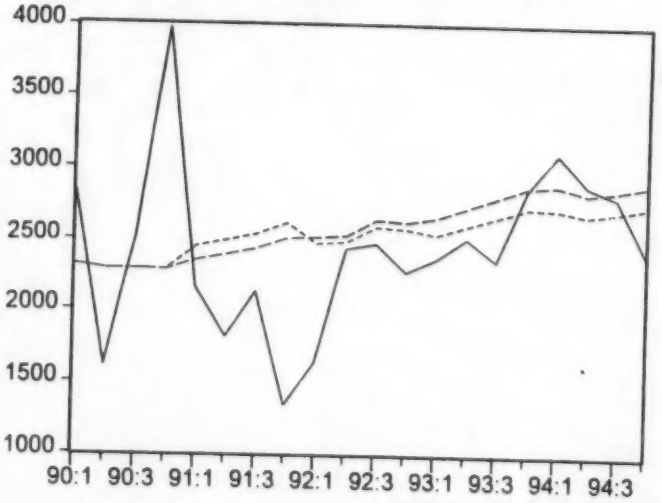
12 9 QUEBEC PERSONAL TAX COLLECTIONS (TPYPQ)



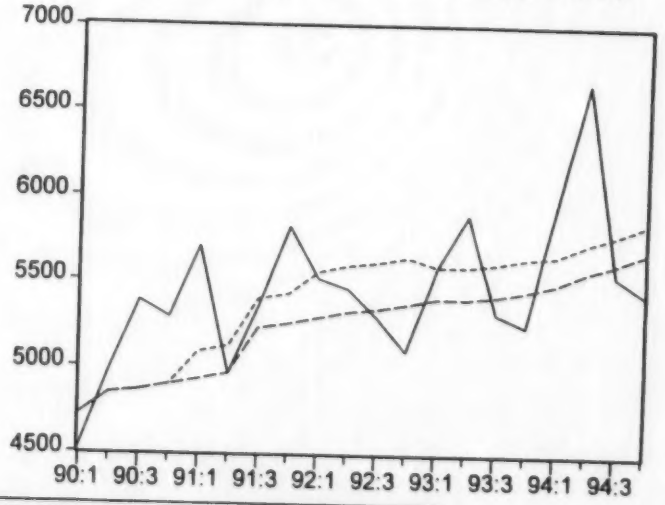
12.10 PLH DIRECT TAXES ON CORPORATE AND GOVERNMENT BUSINESS ENTERPRISES (TCAP)



12.11 PLH REMITTED PROFIT (YPFTP)



12.12 PROVINCIAL PAYROLL TAXES (TPYPRT)



ACTUAL ------ 1-YEAR ROLLING FORECAST ---- 5-YEAR FORECAST

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